



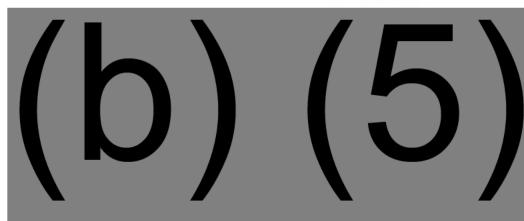




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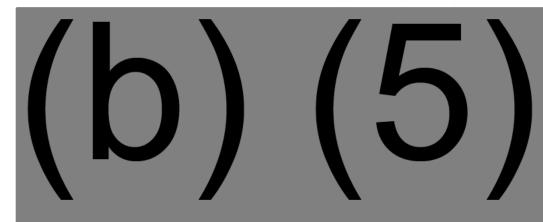
March 11, 2020





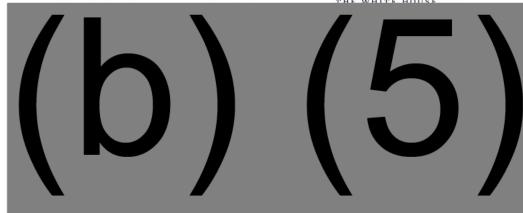










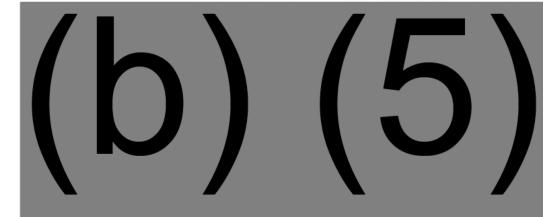




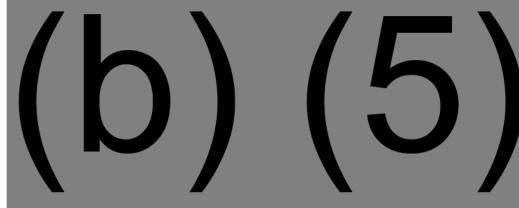
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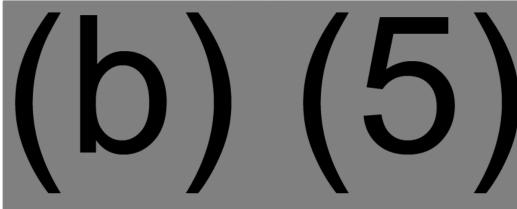


















# Re: [EXTERNAL] Re: COVID-19 Tech Response | Call tomorrow?

From :	Monika Bickert (b)(6)
То:	"Courtney Gregoire (CELA)" (b)(6), Leslie Miller(b)(6), Lauren Culbertson (b)(6)>
Cc:	"Parker, Lynne E. EOP/OSTP"(b)(6)>, Tyler Otto(b)(6), "Kratsios, Michael J. EOP/OSTP"(b)(6), (b)(6)(b)(6), Portia Wu (b)(6)(b)(6)Johanna Shelton (b)(6)(b)(6)Jessica Ashooh <(b)(6)
Date:	Wed, 11 Mar 2020 21:47:19 -0400
I'll be on f	or Facebook. Thanks.
Sent: Wea To: Leslie Cc: Parken Kratsios, N (b)(6) Portia Wu (b)(6) (b)(6) Subject: F	urtney Gregoire (CELA) (b)(6) dnesday, March 11, 2020 5:56:41 PM Miller (b)(6) Lauren Culbertson (b)(6) r, Lynne E. EOP/OSTP (b)(6) Tyler Otto (b)(6) ; Michael J. EOP/OSTP(b)(6) Monika Bickert (b)(6) >; Fred Humphries (CELA) (b)(6) ; (b)(6) Payton Iheme (b)(6) Johanna Shelton Lee Carosi Dunn (b)(6) ; Jessica Ashooh Mark Isakowitz(b)(6) RE: [EXTERNAL] Re: COVID-19 Tech Response   Call tomorrow? will join as well. Thanks.
	lie Miller (b)(6) dnesday, March 11, 2020 5:53 PM
	n Culbertson (b)(6) >
Cc: Parker Kratsios, N <(b)(6) (b)(6) Johanna S (b)(6)	r, Lynne E. EOP/OSTP (b)(6) Tyler Otto (b)(6) >; Michael J. EOP/OSTP (b)(6) ;Courtney Gregoire (CELA) ; Fred Humphries (CELA) ; Portia Wu (b)(6) ;Payton Iheme(b)(6) Shelton (b)(6) Lee Carosi Dunn (b)(6) Jessica Ashooh Mark Isakowitz (b)(6) Re: [EXTERNAL] Re: COVID-19 Tech Response   Call tomorrow?
I'm happ	y to join as well for YouTube/Google.
On Wed, I	Mar 11, 2020 at 5:08 PM Lauren Culbertson (b)(6) > wrote:
Twitter	will be on, too. Thanks!

On Wed, Mar 11, 2020 at 6:57 PM	Parker, Lynne E. EOP/OSTP (b)(6	i) wrote:
Very good, thanks. Here are the	e call-in details:	
Participant Dial-In: (b)(6)		
Participant Code: (b)(6)		
Lynne		
Lynne E. Parker, Ph.D. Deputy Chief Technology Office The White House	r of the United States	
Office: (b)(6)		
From: Tyler Otto (b)(6)		
Sent: Wednesday, March 11, 20		
To: Kratsios, Michael J. EOP/OS	P(b)(6)	
(b)(6)		; Fred
Humphries (CELA) (b)(6)	Portia Wu(b)(6)	; Payton
	nna Shelton (b)(6)	Lee Carosi Dunn
	n Culbertson (b)(6)	; Parker, Lynne E.
EOP/OSTP(b)(6)	; Jessica Ashooh <(b)	
Subject: [EXTERNAL] Re: COVID	-19 Tech Response   Call tomorro	ow?

Reddit can attend the call tomorrow at 12 eastern time. Please send along the call details when available.

Thanks

Tyler

On Mar 11, 2020, at 3:16 PM, Kratsios, Michael J. EOP/OSTP (b)(6) wrote:

Hi Courtney, Monika, Nick, Leslie, and Tyler,

At today's White House COVID-19 Tech Meeting (see attached for the readout), one of the important work streams we identified is for better coordination to address COVID-19 misinformation on online platforms.

One industry collaboration model that might be useful is GIFCT, which you are all familiar with. I think you all could provide great insight into workable cross-industry mechanisms to facilitate information sharing, and to help us set up something similar for COVID-19. And do so very quickly.

Are you available for a short call tomorrow, say noon eastern? We'd greatly appreciate leveraging your expertise on this challenge.

Many thanks, Michael

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House o:(b)(6) <Mail Attachment.eml>



Leslie Miller Google LLC 1600 Amphitheatre Parkway Mountain View, CA 94043 (b)(6) 0 (b)(6) C (b)(6)

# RE: [EXTERNAL] Re: COVID-19 Tech Response | Call tomorrow?

From :	"Courtney Gregoire (CELA)" (b)(6)
то:	Leslie Miller (b)(6) >, Lauren Culbertson (b)(6) >
Cc:	"Parker, Lynne E. EOP/OSTP" (b)(6), Tyler Otto(b)(6)"Kratsios, Michael J. EOP/OSTP"(b)(6), Portia Wu (b)(6)Humphries (CELA)" (b)(6), Portia Wu (b)(6)Payton Iheme (b)(6)Johanna Shelton (b)(6)Dunn (b)(6), Jessica Ashooh (b)(6)>, Mark Isakowitz
Date:	Wed, 11 Mar 2020 20:56:41 -0400
Microsof	t will join as well. Thanks.
Sent: We To: Laure Cc: Parke Kratsios, (b)(6) (b)(6) Johanna (b)(6) Subject: I'm happ On Wed,	slie Miller (b)(6) ednesday, March 11, 2020 5:53 PM en Culbertson (b)(6) er, Lynne E. EOP/OSTP (b)(6) (Courtney Gregoire (CELA) ; Fred Humphries (CELA) ; Portia Wu (b)(6) Payton Iheme <payton@fb.com>; Shelton (b)(6) Mark Isakowitz &lt;(b)(6) Re: [EXTERNAL] Re: COVID-19 Tech Response   Call tomorrow? by to join as well for YouTube/Google. Mar 11, 2020 at 5:08 PM Lauren Culbertson(b)(6) &gt; wrote: er will be on, too. Thanks!</payton@fb.com>
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	icipant Dial-In: (b)(6) icipant Code: (b)(6) ne

## Lynne E. Parker, Ph.D. Deputy Chief Technology Officer of the United States The White House

Office: (b)(6)

From: Tyler Otto (b)(6)				
Sent: Wednesday, March	11, 2020 6:52 PM			
To: Kratsios, Michael J. EC	OP/OSTP(b)(6)		>	
Cc: (b)(6)				Fred
Humphries (CELA) (b)(6)		; Portia Wu (b)(6)		; Payton
Iheme <(b)(6)	Johanna Shelton (k	o)(6)	Lee Carosi Dunn	
(b)(6) ;	Lauren Culbertson	(b)(6)	; Parker, Lynne	E.
EOP/OSTP(b)(6)	L	lessica Ashooh (b)(6)		
Subject: [EXTERNAL] Re: 0	COVID-19 Tech Resp	onse   Call tomorrow?		

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Many thanks, Michael

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House (b)(6) <Mail Attachment.eml>

Lauren M. Culbertson Twitter Public Policy (b)(6) Follow me at @<u>lculbs</u>

Leslie Miller Google LLC 1600 Amphitheatre Parkway Mountain View, CA 94043 (b)(6) (b)(6)

# RE: Google, Amazon, other tech companies meet with White House on helping to track coronavirus spread - The Washington Post

From "Kratsios, Michael J. EOP/OSTP"(b)(6)

To: Nick Sinai (b)(6)

5

Cc: "Parker, Lynne E. EOP/OSTP"(b)(6)

Date: Wed, 11 Mar 2020 18:28:06 -0400

Thank you! Feel free to connect us.

From: Nick Sinai (b)(6)

Sent: Wednesday, March 11, 2020 1:03 PM

To: Kratsios, Michael J. EOP/OSTP (b)(6)

**Subject:** [EXTERNAL] FW: Google, Amazon, other tech companies meet with White House on helping to track coronavirus spread - The Washington Post

Michael,

I have a company (Yext) that could really help -- especially around information dissemination, Q&As, getting info in the large platforms, etc.

They are a public company -- happy to connect you with the CEO/founder. He wants to help/volunteer, but I know how hard it can be to process/evaluate these offers during these times.

Nick

-----Original Message-----From: Nick Sinai (b)(6) Sent: Wednesday, March 11, 2020 12:44 PM To: Nick Sinai <(b)(6) Subject: Google, Amazon, other tech companies meet with White House on helping to track coronavirus spread - The Washington Post

<u>>https://www.washingtonpost.com/technology/2020/03/11/white-house-tech-meeting-coronavirus/<</u>/p>

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Thank you.

**Insight Venture Management, LLC** 

# FW: connect -- COVID19

From :	"Kratsios, Michael J. EOP/OSTP" (b)(6)	
То:	"Parker, Lynne E. EOP/OSTP" (b)(6)	
Date:	Wed, 11 Mar 2020 14:59:52 -0400	
From: C	ourtney Gregoire (CELA) (b)(6)	
	ourtney Gregoire (CELA) <mark>(b)(6)</mark> > /ednesday, March 11, 2020 2:55 PM	
Sent: W		

Michael,

Quick follow-up from our call just now, as I look to convene the folks working on this issue across Microsoft. I know that the DC points of contact for the various tech companies would be the right way to convene a working group. Although a very different content area, the current Global Internet Forum to Counter Terrorism Board representatives are:

- Myself, current Chair
- Monika Bickert (b)(6) Facebook
- Nick Pickles, (b)(6)
- Leslie Miller (b)(6)

I mentioned Reddit would be an important company to engage; and I understand a good point of contact would be Tyler Otto, (b) (6)

Thanks, Courtney

Courtney Gregoire Chief Digital Safety Officer Microsoft Corporation Office: (b)(6) Mobile: (b)(6) (b)(6)

From: Kratsios, Michael J. EOP/OSTP <(b)(6) Sent: Wednesday, March 11, 2020 8:55 AM To: Courtney Gregoire (CELA) (b)(6) Subject: [EXTERNAL] connect -- COVID19

Hi Courtney -- Great seeing you last week at the WH. Do you have a second for a quick call today?

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House o: (b)(6)

# RE: [EXTERNAL] Re: COVID-19 AI Dataset

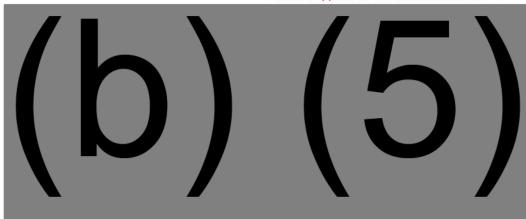
From:	"Parker, Lynne E. EOP/OSTP" (b)(6) >
То:	Anthony Goldbloom (b)(6)
Cc:	"Kratsios, Michael J. EOP/OSTP" (b)(6) , Ben Hamner (b)(6) , Devvret Rishi(b)(6) Sebastian Kohlmeier <(b)(6) , "Parker, Lynne E. EOP/OSTP" (b)(6)
Date:	Thu, 12 Mar 2020 18:46:37 -0400
Attachment s:	AI-COVID-19-Questions.docx (25.19 kB)
( k	))(5)
Lynne	

# (b) (5)

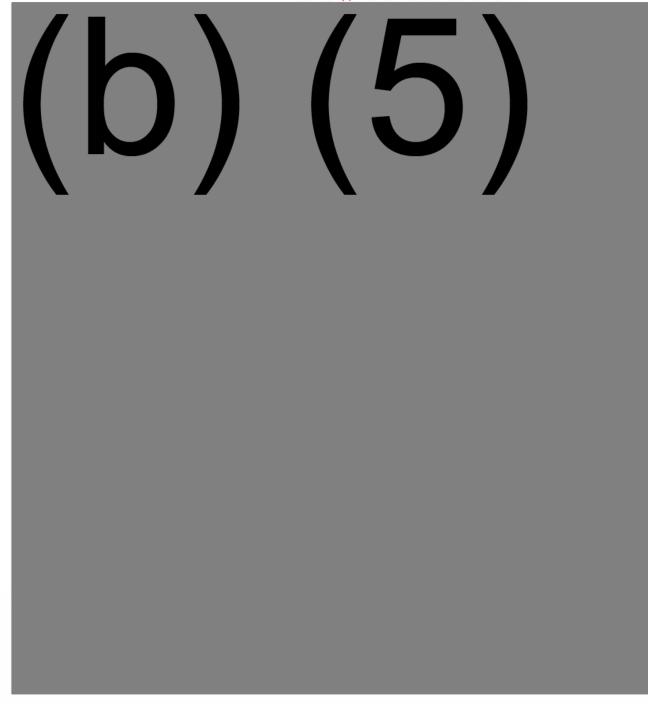
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# (b) (5)

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From:	"Hernandez, Elena R. EOP/OSTP" (b)(6)	
То:	"Baum, Kristina R. EOP/OSTP" (b)(6)	
Cc:	"Kratsios, Michael J. EOP/OSTP" (b)(6) E. EOP/OSTP" (b)(6) >	, "Parker, Lynn
Date:	Thu, 12 Mar 2020 12:33:12 -0400	
Attachment s:	(b) (5) Coronavirus Meeting.docx (18.76 kB	3)
)(5)		
	ristina R. EOP/OSTP(b)(6)	
Cont. Thursday	Marsh 12, 2020 10:12 AM	
	/, March 12, 2020 10:12 AM	
To: Hernandez	, Elena R. EOP/OSTP (b)(6)	
	, Elena R. EOP/OSTP (b)(6)	
To: Hernandez Subject: (b) (5)	, Elena R. EOP/OSTP (b)(6)	
To: Hernandez Subject: (b) (5) Hey!	, Elena R. EOP/OSTP (b)(6)	
To: Hernandez Subject: (b) (5) Hey!	, Elena R. EOP/OSTP (b)(6)	
To: Hernandez Subject: (b) (5) Hey!	, Elena R. EOP/OSTP (b)(6)	
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To: Hernandez Subject: (b) (5) Hey! (b) Best, Kristina Kristina Ba Communicatio	Elena R. EOP/OSTP (b)(6)	
To: Hernandez Subject: (b) (5) Hey! (b) Best, Kristina Kristina Ba Communicatio Office of Scien	aum ns Director nee and Technology Policy	
To: Hernandez Subject: (b) (5) Hey! (b) Best, Kristina Kristina Best, Kristina Communicatio Office of Scien Executive Offic	aum ns Director nee and Technology Policy ce of the President	
To: Hernandez Subject: (b) (5) Hey! (b) Best, Kristina Kristina Ba Communicatio Office of Scien	aum ns Director nee and Technology Policy ce of the President	

\*\*All emails and replies are subject to the Freedom of Information Act\*\*

# (b) (5)

# (b) (5)

# RE: COVID-19 Tech Response | Call tomorrow?

From :	Parker, Lynne E. EOP/OSTP" (b)(6)
То:	Kratsios, Michael J. EOP/OSTP" (b)(6) b)(6)
Cc:	Fred Humphries (CELA)" (b)(6), Portia Wub)(6), Payton Iheme (b)(6)Johanna Sheltonb)(6), Lee Carosi Dunn (b)(6)Lauren Culbertsonb)(6)"Parker, Lynne E. EOP/OSTP" (b)(6)
Date:	Thu, 12 Mar 2020 08:40:14 -0400
Confirmin	today's call at Noon Eastern.
	Dial-In:(b)(6) Code:(b)(6)
Many tha	<s, all.<="" th=""></s,>
-	Parker, Ph.D. ef Technology Officer of the United States House
Office: (b)	3)
	sios, Michael J. EOP/OSTP <mark>(b)(6)</mark> nesday, March 11, 2020 6:16 PM
	mphries (CELA) (b)(6) ; Portia Wu (b)(6) ; Payton
Iheme (b)	
(b)(6) (b)(6)	Lauren Culbertson (b)(6) >; Parker, Lynne E. EOP/OSTP
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Many thanks, Michael

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House o: (b)(6)

# [EXTERNAL] Google comments on AI Regulatory Principles

From:	Kent Walker(b)(6)	
То:	"Kratsios, Michael J. EOP/OSTP" (b)(6) >	
Date:	Fri, 13 Mar 2020 12:14:26 -0400	
Attachments:	Google Submission - AI Regulatory Principles.pdf (171.05 kB)	

### Michael --

It was good to see you at the Five Eyes event last week. We continue to work to promote a coalition of tech companies taking action against CSAM, and appreciate your support for that effort.

I also wanted to personally congratulate you, OSTP and OMB, and the Administration for putting forward a smart, balanced, and coherent national AI policy. Google has submitted favorable comments (attached, which will also be posted <u>here</u>), including some constructive suggestions for next steps. We believe this framework will help government advance the public interest while encouraging innovation, creativity, and economic growth. We've expressed the same thoughts to your colleagues at OIRA. And Google and our GAPP team are prepared to support your efforts in this space going forward, sharing our technical expertise, policy ideas, and experiences implementing our own AI Principles.

On a separate note, we have ramped up our response to COVID-19, and look forward to continuing work with you on that front.

Best, -- Kent

Kent Walker Senior Vice President, Global Affairs / Google LLC



March 12, 2020

Mr. Russell Vought Acting Director Office of Management and Budget Washington, DC 20503

Dear Mr. Vought,

Google welcomes the opportunity to provide comments in response to the Office of Management and Budget's *Request for Comments on a Draft Memorandum to the Heads of Executive Departments and Agencies, "Guidance for Regulation of Artificial Intelligence Applications.*"<sup>1</sup> In particular, we support the memorandum's message that artificial intelligence (AI) and machine learning (ML) hold extraordinary potential to improve our lives and that the responsible development of AI technology should be encouraged, not discouraged. Moreover, we agree that federal agencies must avoid creating unnecessary barriers to AI development and use by taking a thoughtful, context-specific approach when regulating AI that carefully assesses risks and weighs costs and benefits.

### The Promise of Al

Google's mission is to organize the world's information and make it universally accessible and useful. In pursuing this mission, Google is prioritizing investment in advanced technologies such as Al/ML. These technologies make Google's core products and services much more useful to the public, including Android, Assistant, Cloud, Gmail, Maps, Photos, Pixel, Search, YouTube, and many more.

Google is also creating tools to ensure that everyone can access AI, including researchers and developers, entrepreneurs and businesses of all sizes, academics, nonprofits, and governments. Wider accessibility is how AI will have its biggest impact and how society can reap its full promise. Critical to this approach is open-sourcing AI tools through systems such as <u>TensorFlow</u><sup>2</sup>, a framework which makes machine learning faster, smarter, more flexible, and available to a wider community of developers. Google Cloud brings this technology to the enterprise world, offering a range of AI-powered products and solutions, from pre-built APIs for computer vision and natural language processing to end-to-end solutions that are helping to transform sectors such as financial services, retail, healthcare, and beyond.

Al is making it easier for people to go about their daily lives, from managing household and workplace tasks to breaking down language barriers, while also transforming organizations across both the private and public sectors. But the future potential is far greater. Al provides new hope for addressing the world's toughest problems, from rethinking transportation to

<sup>&</sup>lt;sup>1</sup> Federal Register Doc. 2020-00261,

https://www.whitehouse.gov/wp-content/uploads/2020/01/Draft-OMB-Memo-on-Regulation-of-AI-1-7-19.p df.

<sup>&</sup>lt;sup>2</sup> https://www.tensorflow.org/.

advancing scientific discovery to tackling complex environmental challenges. That's why we're conducting research that advances the state-of-the-art in the field, applying Al across many domains. For instance, we've recently pioneered an Al model that can help doctors spot breast cancer in mammograms with greater accuracy, and another that makes immediate, hyperlocal rainfall forecasts more accurately than existing methods to help everything from agricultural productivity to resilience against flooding.

### Using AI Responsibly

We believe that AI will be overwhelmingly beneficial for society. But it is critical that the technology is developed and used to help people — that it is socially beneficial, fair, accountable, and works for everyone. All must be developed and used responsibly in ways that build trust. And potential harms must be acknowledged and mitigated, or prevented.

As a leader in the development and use of AI, Google has recognized both the enormous benefits and the issues that AI raises, and has wrestled with those issues in the context of our own operations. To that end, in 2018 we established principles governing our development and use of Google AI applications, best practices to share in our work with communities outside of Google, and programs to operationalize our efforts.

Our <u>AI Principles</u><sup>3</sup> guide the ethical development and use of AI in our research, products, and services. These guidelines help us avoid unfair bias, rigorously review for safety, design with privacy top-of-mind, and make the technology accountable to people. They also specify areas where we will not design or deploy AI, such as where human rights might be negatively impacted. But principles that simply remain on paper are meaningless. So we've developed business processes to put them into action, such as requiring vigorous testing of Google's AI decisions for fairness and conducting independent assessments of new products against our principles.

We have gone even further and are leading efforts to push for the responsible and socially beneficial use of AI applications developed outside of Google. We believe that all organizations creating AI tools should adopt guiding principles and robust internal review processes. That is why we regularly share our <u>recommended responsible AI practices</u><sup>4</sup> with the broader AI community, other companies, nonprofit organizations, and academia. Google Cloud has also created commercial tools that enable enterprise organizations to incorporate these practices into their own AI applications. For example, we have introduced tools like <u>Explainable AI</u><sup>5</sup> to help our customers better test and understand the outputs of their models. Additionally, we have invested in scaling frameworks like <u>Model Cards</u><sup>6</sup> to increase transparency and comprehension around the proper use and limitations of AI models.

What's more, we've worked closely with governments and civil society stakeholders around the world to seize opportunities and address challenges related to Al. This includes stakeholders at all levels of government here in the United States. Google has provided

<sup>&</sup>lt;sup>3</sup> https://ai.google/principles/.

<sup>&</sup>lt;sup>4</sup> https://ai.google/responsibilities/responsible-ai-practices/.

<sup>&</sup>lt;sup>5</sup> https://cloud.google.com/explainable-ai.

<sup>&</sup>lt;sup>6</sup> https://modelcards.withgoogle.com/about.

technical expertise about AI, insight into responsible approaches to AI, and advice on how to turn AI ethical principles into practice.

## The Role of Regulation

As our CEO Sundar Pichai <u>wrote</u><sup>7</sup> recently, smart government approaches to regulation will play an important role in building trust and ensuring that AI technology is used responsibly, while also encouraging innovation. Regulatory frameworks should consider safety, explainability, fairness, and accountability to promote development of the right technologies in the right ways. Governments should also take a proportionate, risk-based approach by balancing potential harms with the social and economic benefits that will be created by AI. One of the biggest risks related to AI might be that we unnecessarily hamper its use in areas where it is urgently needed. So any regulatory framework should be flexible enough to evolve with this dynamic technology space.

Smart regulatory policy can provide broad guidance across many sectors while allowing for tailored risk-management solutions for individual AI applications in specific contexts. For some AI uses, such as AI-powered medical devices, existing regulatory frameworks are good starting points. In other instances, governments may need to update regulations or even create new regulatory frameworks. In all cases, regulators must take account of relevant costs and benefits and consider non-regulatory responses. There is no reasonable or practical "one-size-fits-all" approach.

## Our Comments on the Draft Memorandum

OMB's draft principles (outlined below) represent a good foundation for advancing Al innovation while also protecting vital public interests. The principles will likewise help prevent conflicting regulatory approaches to Al from developing across the federal government. Going forward, we encourage OMB to develop supplemental guidance for regulatory agencies as experience leads to best practices on regulatory design and impact assessment, and to promote interagency discussions around key learnings. We also support efforts to ensure that agencies have adequate resources and in-house technical expertise to address Al as it continues to evolve.

## 1. Public Trust in Al

Google supports OMB's efforts to bolster public trust in Al. Indeed, this is a core objective that should unite technologists, businesses, policymakers, and citizens. The potential of this technology will not be fully realized if its development is held back by unfounded fears and misunderstanding of Al. Public trust is best achieved if Al technology is developed responsibly and transparently. Accordingly, our Al principles encourage architectures with privacy safeguards, sufficient transparency and accountability over the use of data, and appropriate human direction and control. Google urges agencies to contribute to public efforts to demystify Al technology and highlight its societal benefits.

<sup>&</sup>lt;sup>7</sup> https://www.ft.com/content/3467659a-386d-11ea-ac3c-f68c10993b04.

# 2. Public Participation

Rulemaking related to AI technologies should include robust and fulsome opportunities for public participation and comment, which will allow diverse perspectives to be incorporated and help to avoid unintended consequences. These opportunities should begin at the earliest stages of the rulemaking and continue after the notice is published. Comment periods should be sufficiently long to allow stakeholders of all sizes to prepare useful comments, and supplemental comment should be requested where important questions are raised that warrant further consideration. Agencies should go above and beyond in terms of stakeholder outreach and engagement, including consideration of creative deep-dive formats (e.g. "citizen juries"<sup>8</sup>), expert roundtables, and more. To maximize opportunities for public participation, we encourage OMB to add additional language in the memo to this effect.

# 3. Scientific Integrity and Information Quality

Google agrees that AI policy decisions must be made based on scientifically sound analysis and the highest quality information. Technological innovation is rooted in the scientific method and a commitment to open inquiry, intellectual rigor, integrity, and collaboration. That is why our own AI principles emphasize the importance of aspiring to high standards of scientific excellence, including drawing on scientifically rigorous and multidisciplinary approaches.

For example, when a research team develops a ML model for an application, such as automated lip reading, and writes a paper documenting the model's unprecedented accuracy and the team's evaluation process, we recommend a review aligning the research with potential socially beneficial uses and the estimated scale and severity of potential harms before sharing the paper's findings via publication or presentation. In the case of a lip-reading Al application, for example, the review could determine that the model has benefits for people with hearing or speech impairments and therefore is socially beneficial; the same review could also determine a potential harm such as use of the lip-reading model for nefarious surveillance purposes. They could apply frameworks such as international human rights to assess trade-offs, identify mitigations, and determine whether the model's benefits outweigh its harms, before deciding to share the research.

Accordingly, Google encourages OMB to emphasize that AI knowledge should be shared responsibly, where practicable, through publication of educational materials, best practices, and research, as well as, when appropriate, free open-source tools that can enable more people to develop useful AI applications the right way. OMB should also urge agencies to invest in information quality for any open datasets released to the public for the purpose of training AI systems.

# 4. Risk Assessment and Management

Agencies must take a holistic, risk-based approach to Al. Like all other technologies, Al is not risk-free. But one of Al's greatest promises is that it will help reduce a vast array of risks inherent in everyday life, from traffic accidents and injuries sustained on the job, to

<sup>&</sup>lt;sup>8</sup> https://www.epa.gov/international-cooperation/public-participation-guide-citizen-juries.

life-threatening illnesses, to the secondary effects related to the emission of pollutants. In assessing AI technology, reviewers should consider the risk-substitution impacts of a specific AI application against the non-use scenario. For example, commercial drones equipped with AI-powered analytics can be used to improve inspections of critical infrastructure, such as wind turbines mounted hundreds of feet in the air. Here we see the power of AI applications to advance social good — economic efficiency, environmental benefits, and safety. This is risk substitution in action, as one considers the human safety benefits of replacing human inspections with AI/drone-based inspections (see video example here<sup>9</sup>), as well as the opportunity costs of non-use. We urge agencies to be transparent and consistent as they weigh such considerations to ensure that innovation is not hampered by regulatory uncertainty or overreach.

# 5. Benefits and Costs

As noted above, Google agrees that cost-benefit analysis must be undertaken thoughtfully. Advances in Al will have transformative impacts in a wide range of fields, including healthcare, security, agriculture, energy, transportation, manufacturing, and entertainment. As agencies consider potential responses to Al technologies, they should be careful to take into account the broad range of social and economic factors and benefits related to those technologies, not solely a specific application's immediate impacts or hypothetical downsides. In this section of the memo, OMB should point agencies to the "Non-Regulatory Approaches to Al" section, urging them to consider novel approaches to understanding the impact of a given application before attempting to regulate it. This should include pilot programs and experiments, which will provide agencies with additional information to make an informed decision, rather than evaluating risks and costs based only on speculative *ex ante* forecasts of an application's use.

# 6. Flexibility

Al technologies will allow us to make significant — and fast — safety, efficiency, and productivity advances in industry and throughout society. Google thus agrees that any government responses must be flexible in nature, not rigid or overly prescriptive. Because Al is a continuously evolving technology space, regulations should be designed to accommodate future innovation. A challenge for regulators will be to draft definitions that are sufficiently flexible to account for this inevitable change without being so vague and overbroad as to inject unnecessary uncertainty. OMB should consider how U.S. and international standard-setting bodies can be useful partners with government to assist in designing flexible regulatory and non-regulatory approaches and supporting their evolution over time.

# 7. Fairness and Non-Discrimination

Al algorithms and datasets can reflect, reinforce and amplify, or reduce unfair biases and discrimination. We recognize that defining unfair bias is not always simple, and notions of fairness differ across cultures and societies. Fairness is often multidimensional, and optimizing for one measure of fairness may require trading off another measure of fairness.

<sup>&</sup>lt;sup>9</sup> https://www.youtube.com/watch?v=IF-u7j1x0C0&feature=youtu.be.

Google's Al principles highlight the need to avoid unjust impacts on people, particularly those related to sensitive characteristics such as race, ethnicity, gender, nationality, income, sexual orientation, ability, and political or religious beliefs. ML fairness is an emerging area of Al research in which we are heavily invested, and we have launched relevant open-source tools, including a <u>What-If Tool<sup>10</sup></u> that empowers developers to visualize biases, <u>Fairness Indicators<sup>11</sup></u> that help Cloud users check ML model performance against defined fairness metrics, and an <u>ML Fairness Gym<sup>12</sup></u> for building model simulations that explore the potential long-run impacts of ML-based decision systems in social environments.

We applaud OMB for ensuring that this is a focus and a priority. Moreover, OMB should consider urging agencies to find ways to promote best practices in this space, rather than merely assessing AI technologies on the basis of fairness and non-discrimination criteria. In this regard, organizations in the private sector and academia can be helpful partners.

# 8. Disclosure and Transparency

Google agrees that transparency is important, as we have highlighted prominently in our own Al principles. Google has pioneered the <u>research</u><sup>13</sup> and <u>implementation</u><sup>14</sup> of Model Cards, a framework for providing practical information about the performance and limitations of Al models in order to help developers make better decisions about what models to use for what purpose and how to deploy them responsibly.

However, it is important for agencies to recognize that what constitutes appropriate disclosure and transparency will vary by industry, application, and even specific use cases and audiences. What's more, agencies must consider whether and how transparency features in certain circumstances conflict with privacy interests. Accordingly, we urge agencies to ensure that any government actions related to disclosure and transparency take a common-sense approach, are context-specific, and are not overly broad.

# 9. Safety and Security

We strongly believe that AI applications should be built and tested for safety. This is a foundational element of Google's AI principles, and we apply strong safety and security practices to avoid unintended results that create risks of harm. We also design our AI systems to be appropriately cautious and seek to develop them in accordance with best practices in AI safety research. In many cases, we will test AI technologies in constrained environments and monitor their operation after deployment.

We urge agencies to consult widely with the private sector as questions of safety and security are explored and to stay up-to-date on emerging practices. This is another area where novel, non-regulatory approaches to AI applications must be considered. In this section, OMB should reinforce that agencies examine public-private collaboration (e.g., hackathons,

<sup>&</sup>lt;sup>10</sup> https://pair-code.github.io/what-if-tool/.

<sup>&</sup>lt;sup>11</sup> https://ai.googleblog.com/2019/12/fairness-indicators-scalable.html.

<sup>&</sup>lt;sup>12</sup> https://ai.googleblog.com/2020/02/ml-fairness-gym-tool-for-exploring-long.html.

<sup>&</sup>lt;sup>13</sup> https://arxiv.org/abs/1810.03993.

<sup>&</sup>lt;sup>14</sup> https://modelcards.withgoogle.com/about.

challenges, and joint experiments) to promote safety and security. It is also an area ripe for partnership with U.S. and international industry standard-setting organizations (e.g., NIST, ISO, IEEE), consistent with the principles and policies set forth in <u>OMB Circular A-119</u>.<sup>15</sup>

#### 10. Interagency Coordination

Google supports robust interagency coordination to prevent piecemeal and inconsistent government actions related to the development and use of AI applications. This should include fora and processes to allow agencies to share experience, learnings, and technical and regulatory know-how and capacity. Likewise, we strongly urge OMB to prioritize *international* coordination related to AI-related regulatory and non-regulatory actions, consistent with E.O. 13609.<sup>16</sup> The United States should strive with other nations that share our democratic and societal values to align regulatory approaches so that innovation is not held back by a confusing global patchwork of variable AI standards. The <u>OECD Principles on AI<sup>17</sup></u> are an example of how countries and civil society can work together to reach consensus in this space.

# Non-Regulatory Approaches to Al

As noted above, Google supports the OMB memorandum's direction that agencies examine non-regulatory approaches to AI, such as voluntary consensus standards, pilot programs, sandboxes, and sector-specific policy guidance. AI is a dynamic, quickly evolving technology space that will impact every sector of society. To strike the right balance, agencies should carefully consider, in the specific context of a particular AI application, options aside from a regulatory action. In some cases, this may warrant close monitoring to see how a particular application evolves and to further evaluate its societal impacts. In all of these circumstances, various non-regulatory approaches may be valuable tools to simultaneously promote adequate protections while also preserving the benefits of open innovation. They also offer the opportunity to harness the expertise of private sector technologists and to identify previously unforeseen opportunities for driving responsible innovation.

# Reducing Barriers to the Deployment and Use of AI

Google strongly encourages reduction of barriers related to the responsible deployment and use of Al. OMB's emphasis on access to federal data is important. Consistent with legal, privacy, and security considerations, we urge agencies to proactively identify new opportunities for opening datasets to the public for use in development of Al applications. It is essential that federal agencies lead by example in adopting Al solutions that generate value for society and improve the functioning of government.

Facilitating adoption of AI, however, extends beyond immediate regulatory considerations. It should be considered within the broader context of the Administration's work in areas such as

<sup>&</sup>lt;sup>15</sup> https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-119-1.pdf. <sup>16</sup>

https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/inforeg/inforeg/eo\_13609/eo13609\_05012012 .pdf.

<sup>&</sup>lt;sup>17</sup> https://www.oecd.org/going-digital/ai/principles/.

IT modernization, including migration from legacy infrastructure to the cloud. Reducing barriers for AI thus entails building bridges and encouraging adoption of new technology and IT infrastructure, without which AI cannot be deployed at scale in a meaningful way.

#### Agency Plans to Achieve Consistency with this Memorandum

Executive Order 13859 requires that implementing agencies submit plans to OMB for achieving consistency with the memorandum. Google urges OMB to ensure that agencies conduct outside consultations on their implementation plans, including with the public, business, and all other interested stakeholders. Moreover, we request that agencies publish and seek public comment before finalizing those individual agency plans.

\* \* \*

Google appreciates the opportunity to comment on the memorandum and welcomes any questions, feedback, or opportunities for further discussion.

Respectfully submitted,

Kent Walker

Kent Walker Senior Vice President, Global Affairs Google

CC: Mr. Paul Ray Administrator Office of Information and Regulatory Affairs

Mr. Dominic Mancini Deputy Administrator Office of Information and Regulatory Affairs

Mr. Michael Kratsios Chief Technology Officer Office of Science and Technology Policy

Ms. Lynne Parker Deputy Chief Technology Officer Office of Science and Technology Policy

# FW: [EXTERNAL] Re: COVID-19 AI Dataset

From :	"Parker, Lynne E. EOP/OSTP" (b)(6)
То:	"Kratsios, Michael J. EOP/OSTP" (b)(6) >, "Hernandez, Elena R. EOP/OSTP'(b)(6) "Calcagno, Drew A. EOP/OSTP" (b)(6)
Cc:	"Parker, Lynne E. EOP/OSTP" (b)(6)
Date:	Fri, 13 Mar 2020 07:22:34 -0400
	b) (5)
	evvret Rishi (b)(6)
	day, March 13, 2020 4:01 AM
	ony Goldbloom (b)(6) > sting Kahlmaiar (b)(6)
	stian Kohlmeier (b)(6) Parker, Lynne E. EOP/OSTP
(b)(6) Ben Han	; Kratsios, Michael J. EOP/OSTP (b)(6)
	Re: [EXTERNAL] Re: COVID-19 AI Dataset
Subject:	Re: LEATERNALJ RE: COVID-19 AI Dataset

Thank you again very much for connecting today and providing a first draft of the research questions you are interested in.

As Anthony mentioned, I wanted to send a prototype of what the data hosting & research questions may look like on Kaggle. Please note that all content is simply a placeholder right now, and will be updated once we have the finalized questions & dataset. We (and you) can also easily dynamically make updates as needed.

- 1. You can access the dataset placeholder page using this link.
- 2. You can then click the '<u>Tasks</u>' button towards the top to see the list of open research questions for our ML community to answer.
- 3. You can then click on individual tasks to read more, edit descriptions and see any submissions.

I've also included a quick screen recording here that can show you the flow of seeing the dataset, the relevant questions (called Tasks on our platform) and placeholder submissions.

As Anthony mentioned, once we are ready to release this to the public we can also do more work to promote this dataset & questions including a potential prize for strong solutions. Look forward to working with you on this and please let me know if you have any questions.

Thanks, Dev

On Thu, Mar 12, 2020 at 6:03 PM Anthony Goldbloom <(b)(6) wrote:

Lynne, thanks for sharing the questions. Sebastian, nice to connect and to work with you.

Dev cc'd is the owner on our side. As a next step, he's going to share the prototype page (target tonight).

Sebastian, agree it makes sense for us to cross reference each other's websites (our community might like using Semantic Scholar as a tool for exploring the data). As a next step, can you and Dev connect tomorrow to figure out the best way for Kaggle to get dumps of the raw data? We have an API, so ideal would be something programmatic.

On Thu, Mar 12, 2020 at 4:08 PM Sebastian Kohlmeier <(b)(6) wrote:

Hi Anthony,

Great to meet you and fantastic to see Kaggle involved in this important effort! From a logistics perspective we plan to publish the dataset along with a description and associated metadata (including licensing information) on this web page (currently just a placeholder until we release the new content). Since Kaggle will be hosting the questions it will probably be easiest for us to cross-link from Semantic Scholar to Kaggle and vice-versa for Monday's release. If that makes sense, it would be great if you could connect me with someone at Kaggle so that we can coordinate tomorrow and ensure that the right links and content are in place.

Thanks again and excited to see this go live on Monday!

Sebastian Kohlmeier

Sr. Manager - Business Operations | Semantic Scholar Allen Institute for AI (AI2) (b)(6)

On Thu, Mar 12, 2020 at 3:46 PM Parker, Lynne E. EOP/OSTP (b)(6) > wrote:

Hi Anthony, et al,

Please find attached a draft set of questions for the Kaggle site. Please treat this as a draft, for the purposes of your creating a prototype site, and don't distribute until we give you the final version. We recognize that this is a long set of questions, but I'm of the opinion that in this current crisis, the more different lines of work that we offer to researchers, the more benefits we might gain. If this presents an unwieldy setup for Kaggle, however, then let me know and we can prune the list (but recognizing that prioritizing which questions are potentially most impactful is very difficult for us to do).

I'm also copying Sebastian Kohlmeier from AllenAI, who can talk with you about the dataset. My understanding is that AllenAI would like to host the data, but would be fine with Kaggle mirroring it.

We would like to go live with this effort on Monday, rather than tomorrow. When do you think you might have a draft site ready for us to review?

Let me know if you need anything else just now. We very much appreciate your help and contribution to this effort!

Lynne

# Re: [EXTERNAL] Re: COVID-19 AI Dataset

From :	Devvret Rishi (b)(6)
То:	Sebastian Kohlmeier (b)(6)
Cc:	Anthony Goldbloom (b)(6) , "Parker, Lynne E. EOP/OSTP" (b)(6) , "Kratsios, Michael J. EOP/OSTP" , Ben Hamner (b)(6)
Date:	Fri, 13 Mar 2020 04:03:31 -0400
Thank you	Sebastian! Look forward to catching up.
	Iar 12, 2020 at 8:03 PM Sebastian Kohlmeier (b)(6) > wrote: good! Dev, I will schedule some time for us to sync tomorrow so that we can coordinate!
Thanks	again!
Sebastia	n
	Mar 12, 2020 at 6:03 PM Anthony Goldbloom (b)(6) vrote: e, thanks for sharing the questions. Sebastian, nice to connect and to work with you.
Dev c	c'd is the owner on our side. As a next step, he's going to share the prototype page (target tonight).
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	Manager - Business Operations   Semantic Scholar en Institute for AI (AI2) 6)
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Let me know if you need anything else just now. We very much appreciate your help and contribution to this effort!

Lynne

--Sebastian Kohlmeier

Sr. Manager - Business Operations | Semantic Scholar Allen Institute for AI (AI2) (b)(6)

# **RE: Call on Sunday**

From:	"Parker, Lynne E. EOP/OSTP" (b)(6)	
То:	"Kratsios, Michael J. EOP/OSTP" (b)(6) Matthew (CDC/DDID/NCIRD/ID" (b)(6)	, "Biggerstaff,
Cc:	"Wilson, Matt B. EOP/OSTP" (b)(6) EOP/OSTP" (b)(6)	"Parker, Lynne E.
Date:	Fri, 13 Mar 2020 19:28:55 -0400	
Attachment s:	COVID-19 Tech Task Force White House Overview.pdf (69.3 kB)	

Hi Matt,



Lynne

Lynne E. Parker, Ph.D. Deputy Chief Technology Officer of the United States The White House

Office: (b)(6)

From: Kratsios, Michael J. EOP/OSTP (b)(6) Sent: Friday, March 13, 2020 7:16 PM To: Biggerstaff, Matthew (CDC/DDID/NCIRD/ID(b)(6) Cc: Parker, Lynne E. EOP/OSTP (b)(6) (b)(6) >

Wilson, Matt B. EOP/OSTP

Subject: Call on Sunday

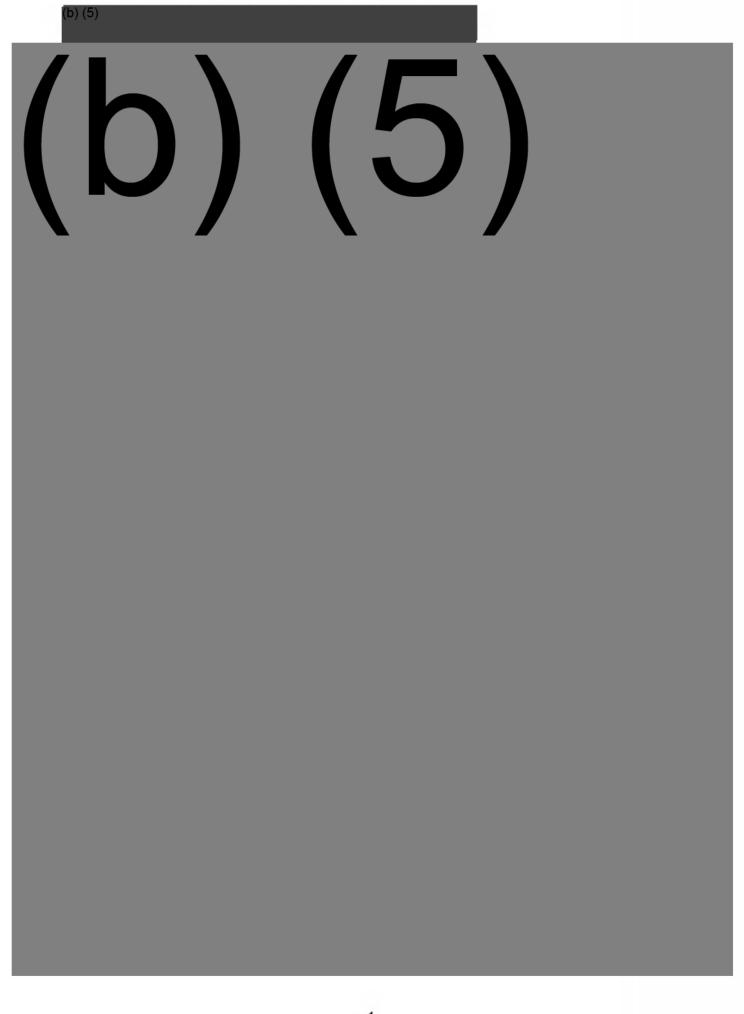
Hi Matt – a group of high profile tech companies has self-assembled to work on better utilizing data to fight the crisis. Their next call is on Sunday. Lynne can send you the details.



Many thanks!

Michael

**Michael Kratsios** Chief Technology Officer of the United States The White House o: (b)(6)



# FW: [EXTERNAL] Google comments on AI Regulatory **Principles**

From:	"Parker, Lynne E. EOP/OSTP" (b)(6)			
То:	"Kratsios, Michael J. EOP/OSTP" (b)(6)			
Cc:	"Parker, Lynne E. EOP/OSTP" (b)(6)			
Date:	Fri, 13 Mar 2020 15:33:09 -0400			
AttachmentGoogle Submission - Draft OMB Memo - Guidance for Regulation of Artificias:Intelligence Applications.pdf (171.05 kB)				
From: Miles Ta	ylor (b)(6)			
Sent: Friday, M	larch 13, 2020 12:48 PM			
To: Parker, Lyn	ne E. EOP/OSTP (b)(6) >			

Cc: Michael Fitzpatrick <(b)(6)

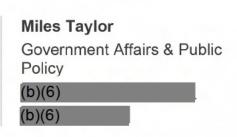
; Johanna Shelton (b)(6) Subject: [EXTERNAL] Google comments on AI Regulatory Principles

Lynne,

I wanted to let you know that Google has submitted comments (attached, which will also be posted here) on the OMB AI regulatory principles. I think you'll find them to be favorable toward the Administration's draft memo, along with some constructive suggestions. As you and I have discussed, we think the framework strikes the right balance, and we're grateful for your team's leadership in this space. Let me know if you all have any questions. We look forward to engaging on this further!

Best, M

 $\mathbf{x}$ 





March 12, 2020

Mr. Russell Vought Acting Director Office of Management and Budget Washington, DC 20503

Dear Mr. Vought,

Google welcomes the opportunity to provide comments in response to the Office of Management and Budget's *Request for Comments on a Draft Memorandum to the Heads of Executive Departments and Agencies, "Guidance for Regulation of Artificial Intelligence Applications.*"<sup>1</sup> In particular, we support the memorandum's message that artificial intelligence (AI) and machine learning (ML) hold extraordinary potential to improve our lives and that the responsible development of AI technology should be encouraged, not discouraged. Moreover, we agree that federal agencies must avoid creating unnecessary barriers to AI development and use by taking a thoughtful, context-specific approach when regulating AI that carefully assesses risks and weighs costs and benefits.

#### The Promise of Al

Google's mission is to organize the world's information and make it universally accessible and useful. In pursuing this mission, Google is prioritizing investment in advanced technologies such as Al/ML. These technologies make Google's core products and services much more useful to the public, including Android, Assistant, Cloud, Gmail, Maps, Photos, Pixel, Search, YouTube, and many more.

Google is also creating tools to ensure that everyone can access AI, including researchers and developers, entrepreneurs and businesses of all sizes, academics, nonprofits, and governments. Wider accessibility is how AI will have its biggest impact and how society can reap its full promise. Critical to this approach is open-sourcing AI tools through systems such as <u>TensorFlow</u><sup>2</sup>, a framework which makes machine learning faster, smarter, more flexible, and available to a wider community of developers. Google Cloud brings this technology to the enterprise world, offering a range of AI-powered products and solutions, from pre-built APIs for computer vision and natural language processing to end-to-end solutions that are helping to transform sectors such as financial services, retail, healthcare, and beyond.

Al is making it easier for people to go about their daily lives, from managing household and workplace tasks to breaking down language barriers, while also transforming organizations across both the private and public sectors. But the future potential is far greater. Al provides new hope for addressing the world's toughest problems, from rethinking transportation to

<sup>&</sup>lt;sup>1</sup> Federal Register Doc. 2020-00261,

https://www.whitehouse.gov/wp-content/uploads/2020/01/Draft-OMB-Memo-on-Regulation-of-AI-1-7-19.p df.

<sup>&</sup>lt;sup>2</sup> https://www.tensorflow.org/.

advancing scientific discovery to tackling complex environmental challenges. That's why we're conducting research that advances the state-of-the-art in the field, applying Al across many domains. For instance, we've recently pioneered an Al model that can help doctors spot breast cancer in mammograms with greater accuracy, and another that makes immediate, hyperlocal rainfall forecasts more accurately than existing methods to help everything from agricultural productivity to resilience against flooding.

#### Using AI Responsibly

We believe that AI will be overwhelmingly beneficial for society. But it is critical that the technology is developed and used to help people — that it is socially beneficial, fair, accountable, and works for everyone. All must be developed and used responsibly in ways that build trust. And potential harms must be acknowledged and mitigated, or prevented.

As a leader in the development and use of AI, Google has recognized both the enormous benefits and the issues that AI raises, and has wrestled with those issues in the context of our own operations. To that end, in 2018 we established principles governing our development and use of Google AI applications, best practices to share in our work with communities outside of Google, and programs to operationalize our efforts.

Our <u>AI Principles</u><sup>3</sup> guide the ethical development and use of AI in our research, products, and services. These guidelines help us avoid unfair bias, rigorously review for safety, design with privacy top-of-mind, and make the technology accountable to people. They also specify areas where we will not design or deploy AI, such as where human rights might be negatively impacted. But principles that simply remain on paper are meaningless. So we've developed business processes to put them into action, such as requiring vigorous testing of Google's AI decisions for fairness and conducting independent assessments of new products against our principles.

We have gone even further and are leading efforts to push for the responsible and socially beneficial use of AI applications developed outside of Google. We believe that all organizations creating AI tools should adopt guiding principles and robust internal review processes. That is why we regularly share our <u>recommended responsible AI practices</u><sup>4</sup> with the broader AI community, other companies, nonprofit organizations, and academia. Google Cloud has also created commercial tools that enable enterprise organizations to incorporate these practices into their own AI applications. For example, we have introduced tools like <u>Explainable AI</u><sup>5</sup> to help our customers better test and understand the outputs of their models. Additionally, we have invested in scaling frameworks like <u>Model Cards</u><sup>6</sup> to increase transparency and comprehension around the proper use and limitations of AI models.

What's more, we've worked closely with governments and civil society stakeholders around the world to seize opportunities and address challenges related to Al. This includes stakeholders at all levels of government here in the United States. Google has provided

<sup>&</sup>lt;sup>3</sup> https://ai.google/principles/.

<sup>&</sup>lt;sup>4</sup> https://ai.google/responsibilities/responsible-ai-practices/.

<sup>&</sup>lt;sup>5</sup> https://cloud.google.com/explainable-ai.

<sup>&</sup>lt;sup>6</sup> https://modelcards.withgoogle.com/about.

technical expertise about AI, insight into responsible approaches to AI, and advice on how to turn AI ethical principles into practice.

# The Role of Regulation

As our CEO Sundar Pichai <u>wrote</u><sup>7</sup> recently, smart government approaches to regulation will play an important role in building trust and ensuring that AI technology is used responsibly, while also encouraging innovation. Regulatory frameworks should consider safety, explainability, fairness, and accountability to promote development of the right technologies in the right ways. Governments should also take a proportionate, risk-based approach by balancing potential harms with the social and economic benefits that will be created by AI. One of the biggest risks related to AI might be that we unnecessarily hamper its use in areas where it is urgently needed. So any regulatory framework should be flexible enough to evolve with this dynamic technology space.

Smart regulatory policy can provide broad guidance across many sectors while allowing for tailored risk-management solutions for individual AI applications in specific contexts. For some AI uses, such as AI-powered medical devices, existing regulatory frameworks are good starting points. In other instances, governments may need to update regulations or even create new regulatory frameworks. In all cases, regulators must take account of relevant costs and benefits and consider non-regulatory responses. There is no reasonable or practical "one-size-fits-all" approach.

# Our Comments on the Draft Memorandum

OMB's draft principles (outlined below) represent a good foundation for advancing Al innovation while also protecting vital public interests. The principles will likewise help prevent conflicting regulatory approaches to Al from developing across the federal government. Going forward, we encourage OMB to develop supplemental guidance for regulatory agencies as experience leads to best practices on regulatory design and impact assessment, and to promote interagency discussions around key learnings. We also support efforts to ensure that agencies have adequate resources and in-house technical expertise to address Al as it continues to evolve.

# 1. Public Trust in Al

Google supports OMB's efforts to bolster public trust in Al. Indeed, this is a core objective that should unite technologists, businesses, policymakers, and citizens. The potential of this technology will not be fully realized if its development is held back by unfounded fears and misunderstanding of Al. Public trust is best achieved if Al technology is developed responsibly and transparently. Accordingly, our Al principles encourage architectures with privacy safeguards, sufficient transparency and accountability over the use of data, and appropriate human direction and control. Google urges agencies to contribute to public efforts to demystify Al technology and highlight its societal benefits.

<sup>&</sup>lt;sup>7</sup> https://www.ft.com/content/3467659a-386d-11ea-ac3c-f68c10993b04.

# 2. Public Participation

Rulemaking related to AI technologies should include robust and fulsome opportunities for public participation and comment, which will allow diverse perspectives to be incorporated and help to avoid unintended consequences. These opportunities should begin at the earliest stages of the rulemaking and continue after the notice is published. Comment periods should be sufficiently long to allow stakeholders of all sizes to prepare useful comments, and supplemental comment should be requested where important questions are raised that warrant further consideration. Agencies should go above and beyond in terms of stakeholder outreach and engagement, including consideration of creative deep-dive formats (e.g. "citizen juries"<sup>8</sup>), expert roundtables, and more. To maximize opportunities for public participation, we encourage OMB to add additional language in the memo to this effect.

# 3. Scientific Integrity and Information Quality

Google agrees that AI policy decisions must be made based on scientifically sound analysis and the highest quality information. Technological innovation is rooted in the scientific method and a commitment to open inquiry, intellectual rigor, integrity, and collaboration. That is why our own AI principles emphasize the importance of aspiring to high standards of scientific excellence, including drawing on scientifically rigorous and multidisciplinary approaches.

For example, when a research team develops a ML model for an application, such as automated lip reading, and writes a paper documenting the model's unprecedented accuracy and the team's evaluation process, we recommend a review aligning the research with potential socially beneficial uses and the estimated scale and severity of potential harms before sharing the paper's findings via publication or presentation. In the case of a lip-reading Al application, for example, the review could determine that the model has benefits for people with hearing or speech impairments and therefore is socially beneficial; the same review could also determine a potential harm such as use of the lip-reading model for nefarious surveillance purposes. They could apply frameworks such as international human rights to assess trade-offs, identify mitigations, and determine whether the model's benefits outweigh its harms, before deciding to share the research.

Accordingly, Google encourages OMB to emphasize that AI knowledge should be shared responsibly, where practicable, through publication of educational materials, best practices, and research, as well as, when appropriate, free open-source tools that can enable more people to develop useful AI applications the right way. OMB should also urge agencies to invest in information quality for any open datasets released to the public for the purpose of training AI systems.

# 4. Risk Assessment and Management

Agencies must take a holistic, risk-based approach to Al. Like all other technologies, Al is not risk-free. But one of Al's greatest promises is that it will help reduce a vast array of risks inherent in everyday life, from traffic accidents and injuries sustained on the job, to

<sup>&</sup>lt;sup>8</sup> https://www.epa.gov/international-cooperation/public-participation-guide-citizen-juries.

life-threatening illnesses, to the secondary effects related to the emission of pollutants. In assessing AI technology, reviewers should consider the risk-substitution impacts of a specific AI application against the non-use scenario. For example, commercial drones equipped with AI-powered analytics can be used to improve inspections of critical infrastructure, such as wind turbines mounted hundreds of feet in the air. Here we see the power of AI applications to advance social good — economic efficiency, environmental benefits, and safety. This is risk substitution in action, as one considers the human safety benefits of replacing human inspections with AI/drone-based inspections (see video example here<sup>9</sup>), as well as the opportunity costs of non-use. We urge agencies to be transparent and consistent as they weigh such considerations to ensure that innovation is not hampered by regulatory uncertainty or overreach.

# 5. Benefits and Costs

As noted above, Google agrees that cost-benefit analysis must be undertaken thoughtfully. Advances in Al will have transformative impacts in a wide range of fields, including healthcare, security, agriculture, energy, transportation, manufacturing, and entertainment. As agencies consider potential responses to Al technologies, they should be careful to take into account the broad range of social and economic factors and benefits related to those technologies, not solely a specific application's immediate impacts or hypothetical downsides. In this section of the memo, OMB should point agencies to the "Non-Regulatory Approaches to Al" section, urging them to consider novel approaches to understanding the impact of a given application before attempting to regulate it. This should include pilot programs and experiments, which will provide agencies with additional information to make an informed decision, rather than evaluating risks and costs based only on speculative *ex ante* forecasts of an application's use.

# 6. Flexibility

Al technologies will allow us to make significant — and fast — safety, efficiency, and productivity advances in industry and throughout society. Google thus agrees that any government responses must be flexible in nature, not rigid or overly prescriptive. Because Al is a continuously evolving technology space, regulations should be designed to accommodate future innovation. A challenge for regulators will be to draft definitions that are sufficiently flexible to account for this inevitable change without being so vague and overbroad as to inject unnecessary uncertainty. OMB should consider how U.S. and international standard-setting bodies can be useful partners with government to assist in designing flexible regulatory and non-regulatory approaches and supporting their evolution over time.

# 7. Fairness and Non-Discrimination

Al algorithms and datasets can reflect, reinforce and amplify, or reduce unfair biases and discrimination. We recognize that defining unfair bias is not always simple, and notions of fairness differ across cultures and societies. Fairness is often multidimensional, and optimizing for one measure of fairness may require trading off another measure of fairness.

<sup>&</sup>lt;sup>9</sup> https://www.youtube.com/watch?v=IF-u7j1x0C0&feature=youtu.be.

Google's Al principles highlight the need to avoid unjust impacts on people, particularly those related to sensitive characteristics such as race, ethnicity, gender, nationality, income, sexual orientation, ability, and political or religious beliefs. ML fairness is an emerging area of Al research in which we are heavily invested, and we have launched relevant open-source tools, including a <u>What-If Tool<sup>10</sup></u> that empowers developers to visualize biases, <u>Fairness Indicators<sup>11</sup></u> that help Cloud users check ML model performance against defined fairness metrics, and an <u>ML Fairness Gym<sup>12</sup></u> for building model simulations that explore the potential long-run impacts of ML-based decision systems in social environments.

We applaud OMB for ensuring that this is a focus and a priority. Moreover, OMB should consider urging agencies to find ways to promote best practices in this space, rather than merely assessing AI technologies on the basis of fairness and non-discrimination criteria. In this regard, organizations in the private sector and academia can be helpful partners.

# 8. Disclosure and Transparency

Google agrees that transparency is important, as we have highlighted prominently in our own Al principles. Google has pioneered the <u>research</u><sup>13</sup> and <u>implementation</u><sup>14</sup> of Model Cards, a framework for providing practical information about the performance and limitations of Al models in order to help developers make better decisions about what models to use for what purpose and how to deploy them responsibly.

However, it is important for agencies to recognize that what constitutes appropriate disclosure and transparency will vary by industry, application, and even specific use cases and audiences. What's more, agencies must consider whether and how transparency features in certain circumstances conflict with privacy interests. Accordingly, we urge agencies to ensure that any government actions related to disclosure and transparency take a common-sense approach, are context-specific, and are not overly broad.

# 9. Safety and Security

We strongly believe that AI applications should be built and tested for safety. This is a foundational element of Google's AI principles, and we apply strong safety and security practices to avoid unintended results that create risks of harm. We also design our AI systems to be appropriately cautious and seek to develop them in accordance with best practices in AI safety research. In many cases, we will test AI technologies in constrained environments and monitor their operation after deployment.

We urge agencies to consult widely with the private sector as questions of safety and security are explored and to stay up-to-date on emerging practices. This is another area where novel, non-regulatory approaches to AI applications must be considered. In this section, OMB should reinforce that agencies examine public-private collaboration (e.g., hackathons,

<sup>&</sup>lt;sup>10</sup> https://pair-code.github.io/what-if-tool/.

<sup>&</sup>lt;sup>11</sup> https://ai.googleblog.com/2019/12/fairness-indicators-scalable.html.

<sup>&</sup>lt;sup>12</sup> https://ai.googleblog.com/2020/02/ml-fairness-gym-tool-for-exploring-long.html.

<sup>&</sup>lt;sup>13</sup> https://arxiv.org/abs/1810.03993.

<sup>&</sup>lt;sup>14</sup> https://modelcards.withgoogle.com/about.

challenges, and joint experiments) to promote safety and security. It is also an area ripe for partnership with U.S. and international industry standard-setting organizations (e.g., NIST, ISO, IEEE), consistent with the principles and policies set forth in <u>OMB Circular A-119</u>.<sup>15</sup>

#### 10. Interagency Coordination

Google supports robust interagency coordination to prevent piecemeal and inconsistent government actions related to the development and use of AI applications. This should include fora and processes to allow agencies to share experience, learnings, and technical and regulatory know-how and capacity. Likewise, we strongly urge OMB to prioritize *international* coordination related to AI-related regulatory and non-regulatory actions, consistent with E.O. 13609.<sup>16</sup> The United States should strive with other nations that share our democratic and societal values to align regulatory approaches so that innovation is not held back by a confusing global patchwork of variable AI standards. The <u>OECD Principles on AI<sup>17</sup></u> are an example of how countries and civil society can work together to reach consensus in this space.

# Non-Regulatory Approaches to Al

As noted above, Google supports the OMB memorandum's direction that agencies examine non-regulatory approaches to AI, such as voluntary consensus standards, pilot programs, sandboxes, and sector-specific policy guidance. AI is a dynamic, quickly evolving technology space that will impact every sector of society. To strike the right balance, agencies should carefully consider, in the specific context of a particular AI application, options aside from a regulatory action. In some cases, this may warrant close monitoring to see how a particular application evolves and to further evaluate its societal impacts. In all of these circumstances, various non-regulatory approaches may be valuable tools to simultaneously promote adequate protections while also preserving the benefits of open innovation. They also offer the opportunity to harness the expertise of private sector technologists and to identify previously unforeseen opportunities for driving responsible innovation.

# Reducing Barriers to the Deployment and Use of AI

Google strongly encourages reduction of barriers related to the responsible deployment and use of Al. OMB's emphasis on access to federal data is important. Consistent with legal, privacy, and security considerations, we urge agencies to proactively identify new opportunities for opening datasets to the public for use in development of Al applications. It is essential that federal agencies lead by example in adopting Al solutions that generate value for society and improve the functioning of government.

Facilitating adoption of AI, however, extends beyond immediate regulatory considerations. It should be considered within the broader context of the Administration's work in areas such as

<sup>&</sup>lt;sup>15</sup> https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-119-1.pdf. <sup>16</sup>

https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/inforeg/inforeg/eo\_13609/eo13609\_05012012 .pdf.

<sup>&</sup>lt;sup>17</sup> https://www.oecd.org/going-digital/ai/principles/.

IT modernization, including migration from legacy infrastructure to the cloud. Reducing barriers for AI thus entails building bridges and encouraging adoption of new technology and IT infrastructure, without which AI cannot be deployed at scale in a meaningful way.

#### Agency Plans to Achieve Consistency with this Memorandum

Executive Order 13859 requires that implementing agencies submit plans to OMB for achieving consistency with the memorandum. Google urges OMB to ensure that agencies conduct outside consultations on their implementation plans, including with the public, business, and all other interested stakeholders. Moreover, we request that agencies publish and seek public comment before finalizing those individual agency plans.

\* \* \*

Google appreciates the opportunity to comment on the memorandum and welcomes any questions, feedback, or opportunities for further discussion.

Respectfully submitted,

Kent Walker

Kent Walker Senior Vice President, Global Affairs Google

CC: Mr. Paul Ray Administrator Office of Information and Regulatory Affairs

Mr. Dominic Mancini Deputy Administrator Office of Information and Regulatory Affairs

Mr. Michael Kratsios Chief Technology Officer Office of Science and Technology Policy

Ms. Lynne Parker Deputy Chief Technology Officer Office of Science and Technology Policy

# Re: [EXTERNAL] Re: COVID-19 Open Research Dataset Press Call

From :	Anthony Goldbloom (b)(6)	
То:	Devvret Rishi (b) (6)	
Cc:	"Hernandez, Elena R. EOP/OSTP" (b)(6) J. EOP/OSTP" <(b)(6) <(b)(6) Pete Voss <(b)(6)	>, "Kratsios, Michael Parker, Lynne E. EOP/OSTP"
Date:	Sat, 14 Mar 2020 23:38:36 -0400	

Elena, some small changes to my quote.

"It's difficult for people to manually go through more than 20,000 articles and synthesize their findings. Recent advances in technology can be helpful here. We're putting machine readable versions of these articles in front of our community of more than 4 million data scientists. Our hope is that AI can be used to help find answers to a key set of questions about COVID-19."

Also adding Pete from Google's comms team.

Anthony

On Sat, Mar 14, 2020 at 3:50 PM Devvret Rishi(b)(6)	> wrote:
Thank you Elena, Michael, and Lynne - really looking forward to th	is launch.

The URL for the dataset and challenges which will be made public on Monday at 2pm EST is: <a href="https://www.kaggle.com/allen-institute-for-ai/CORD-19-research-challenge<">https://www.kaggle.com/allen-institute-for-ai/CORD-19-research-challenge</a>. We may make a short URL version of this before launch on Monday, in which case I will also circulate that with you asap.

In case you're interested, you can view a staging (not for public release) version of the dataset <u>here</u> and the list of the tasks <u>here</u>. We're reviewing these iteratively with Lynne.

Best, Dev

On Sat, Mar 14, 2020 at 3:38 PM Anthony Goldbloom (b)(6) wrote:

Elena, adding dev from our team. He can share the URLs with you (to replace the placeholders in the current press release).

On Sat, Mar 14, 2020, 11:04 AM Hernandez, Elena R. EOP/OSTP (b)(6)

> wrote:

(a)

That's perfect, thanks Anthony for the quick turnaround! We are planning for 2pm on Monday for the call.

Will be back in touch soon with more details on the call and the latest version of the press release for your awareness, but let us know if you have any questions in the meantime. I can also be reached at (b)(6)

Elena			
Elena Hernandez			
Press Secretary			
Office of Science and T	Cechnology Policy		
The White House			
Desk: (b)(6)	Mobile: (b)(6)		
(b)(6)			
× / × /			
From: Anthony Goldblo			
Sent: Saturday, March To: Kratsios, Michael J.		_	_
Cc: Parker, Lynne E. EO			; Hernandez, Elena R. EOP/OST
(b)(6)	F/031F (b)(0)	-	, Hernandez, Liena K. LOF/031
	e: COVID-19 Open Resea	arch Dataset Pres	s Call
	the section is obein these	and buttoot inco	

Michael for sure.

Lynne and Elena, as far as quotes are concerned, does this work? I'd plan to say something similar on the teleconference.

"It's difficult for humans to manually go through 24K+ articles and synthesize their findings. Recent advances in the ability of machines to process natural language mean that AI might be helpful here. We're putting this dataset up in front of our community of 4.3MM data scientists in the hope that the world's AI community can help find answers to a key set of questions about COVID-19."

Anthony

On Sat, Mar 14, 2020 at 8:36 AM Kratsios, Michael J. EOP/OSTP < (b)(6) wrote:

Hi Anthony,

We are so grateful for the work by your team to prepare the dataset and tasks for Monday. Having it up on your platform will make a really big difference.

To issue our call to action and raise awareness across both the public and the scientific community, the we are hosting a media briefing call on Monday and putting out a press release. I plan to give brief remarks and would love to have you dial-in and speak for a minute or two as well on kaggle's roll in this effort. Please let us know if you can join.

Attached is a the draft press release and the comms plan. If you'd like to include a quote, feel free to send it to Lynne and Elena (cced) who are running point on the Monday roll-out.

Thanks again for all your help!

Best,

Michael

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House o: (b)(6)

# Re: [EXTERNAL] Re: COVID-19 Tech Response | Call tomorrow?

"Courtney Gregoire (CELA)" (b)(6)
lculbertson <(b) (6) >, Ifmiller (b)(6)
"Kratsios, Michael J. EOP/OSTP" (b)(6)       >, "Fred Humphries         (CELA)'(b)(6)       Johanna Shelton (b)(6)       Lee Carosi         Dunn (b)(6)       "Parker, Lynne E. EOP/OSTP"       Lee Carosi         (b)(6)       , payton (b)(6)       , Portia Wu         (b)(6)       , monika <(b)(6)
Sat, 14 Mar 2020 20:29:06 -0400
Microsoft as well ie Miller <mark>(b)(6)</mark> rday, March 14, 2020 4:34 PM tson s, Michael J. EOP/OSTP; Fred Humphries (CELA); Johanna Shelton; Lee Carosi Dunn; Parker, Lynne E. ; payton; Portia Wu; Courtney Gregoire (CELA); monika; npickles; Tyler Otto EXTERNAL] Re: COVID-19 Tech Response   Call tomorrow?
works for YouTube/Google as well, thanks.
ar 14, 2020 at 3:13 PM Lauren Culbertson (b)(6) > wrote: for Twitter. Thanks!
Mar 14, 2020 at 6:02 PM Kratsios, Michael J. EOP/OSTP (b)(6) wrote:
l – wanted to follow-up on our call. Can we set up a time for Monday to reconvene and get an update on current thinking?
4pm?
xs,
ael
<pre>i: Kratsios, Michael J. EOP/OSTP Wednesday, March 11, 2020 6:16 PM )(6) Fred Humphries (CELA)'(b)(6) (b)(6) ('Johanna Shelton' (b)(6)) ('Lauren Culbertson' &lt; (b)(6)) ('Lauren Culbertson' &lt; (b)(6)) ('Sherror Culbertson</pre>

(b)(6) Subject: COVID-19 Tech Response | Call tomorrow?

Hi Courtney, Monika, Nick, Leslie, and Tyler,

At today's White House COVID-19 Tech Meeting (see attached for the readout), one of the important work streams we identified is for better coordination to address COVID-19 misinformation on online platforms.

One industry collaboration model that might be useful is GIFCT, which you are all familiar with. I think you all could provide great insight into workable cross-industry mechanisms to facilitate information sharing, and to help us set up something similar for COVID-19. And do so very quickly.

Are you available for a short call tomorrow, say noon eastern? We'd greatly appreciate leveraging your expertise on this challenge.

Many thanks,

Michael

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House o: (b)(6)

--#mobile□

Leslie Miller Google LLC 1600 Amphitheatre Parkway Mountain View, CA 94043 (b)(6) 0 (b)(6) c (b)(6)

# RE: [EXTERNAL] Re: COVID-19 AI Dataset

From :	"Parker, Lynne E. EOP/OSTP"(b)(6)	
То:	"Kratsios, Michael J. EOP/OSTP" (b)(6) EOP/OSTP" (b)(6)	"Hernandez, Elena R.
Cc:	"Parker, Lynne E. EOP/OSTP" (b)(6)	
Date:	Sat, 14 Mar 2020 20:27:51 -0400	
Thanks.	(b) (5)	
(b) (5)		
<b>Sent:</b> Sa <b>To:</b> Park (b)(6)	ratsios, Michael J. EOP/OSTP <mark>(b)(6)</mark> turday, March 14, 2020 7:28 PM er, Lynne E. EOP/OSTP <mark>(b)(6)</mark> : RE: [EXTERNAL] Re: COVID-19 AI Dataset	Hernandez, Elena R. EOP/OSTP
(k	) (5)	
Sent: Sa To: Krat (b)(6) Cc: Park	arker, Lynne E. EOP/OSTP (b)(6) turday, March 14, 2020 7:15 PM sios, Michael J. EOP/OSTP (b)(6) > er, Lynne E. EOP/OSTP (b)(6) : FW: [EXTERNAL] Re: COVID-19 AI Dataset	Hernandez, Elena R. EOP/OSTP
	b) (	5)

From: Devvret Rishi (b)(6)		
Sent: Saturday, March 14,	2020 7:02 PM	
To: Parker, Lynne E. EOP/C	DSTP <(b)(6)	
Cc: Anthony Goldbloom (b	)(6)	Sebastian
Kohlmeier (b)(6)	; Ben Hamner (b)(6)	Julia Elliott
(b)(6)		

Subject: Re: [EXTERNAL] Re: COVID-19 AI Dataset

Hi Lynne,

We've made all the updates to the dataset and created tasks from the new questions from NASEM. They're ready for your review again from the shared <u>link</u>.

One note on the Tasks – We've currently erred on the side of including all the questions we can, even those that may not be a good fit for data mining. We're going to take another pass to see which we can consolidate further (and in some cases, discard if it's a particularly poor fit). Please let us know if you have any strong preferences on how we do this, or if you have specific Tasks you'd like to flag for edits or removal after your review.

I wanted to also raise one other item for your consideration. In coordination with the Allen Institute, we've decided we'd like to offer monetary prizes to incentivize participation in the challenge. The budget for these will come from our team, and the prizes may take the form of donations to charitable organizations working on COVID-19 response (the latter point is pending confirmation on logistics). There are two items I would appreciate your feedback on here:

- For the prizes, we'd like to have a timeline for eligibility. We plan to communicate that we'll do the first round of review of submissions about 6 weeks after launch, and close the prize window overall 3 months after launch. Do these timelines seem appropriate to you, or any flags you'd like to raise? The dataset, tasks and submission window will continue to be live after the prize window close.
- It would be great to have a subject-matter expert who can help us review the submissions and decide which does the best in addressing the underlying research questions, against a rubric we've set. We hope to work with the Allen Institute on this, but wanted to also see if you had any recommended judges to review the submissions.

Thanks, Dev

On Sat, Mar 14, 2020 at 8:57 AM Parker, Lynne E. EOP/OSTP (b)(6) > wrote:

Hi Dev,

One more edit - please update the acknowledgements as follows:

This dataset was created by the Allen Institute for Al in partnership with the Chan Zuckerberg Initiative, Georgetown University's Center for Security and Emerging Technology, Microsoft Research, and the National Library of Medicine - National Institutes of Health, in coordination with the White House Office of Science and Technology Policy. Thanks, Lynne

 From: Parker, Lynne E. EOP/OSTP

 Sent: Saturday, March 14, 2020 10:45 AM

 To: 'Devvret Rishi' (b)(6)

 Cc: Anthony Goldbloom (b)(6)
 Sebastian

 Kohlmeier (b)(6)
 ; Ben Hamner(b)(6)
 Julia Elliott

 (b)(6)
 ; Parker, Lynne E. EOP/OSTP (b)(6)
 Subject: RE: [EXTERNAL] Re: COVID-19 AI Dataset

Hi Dev,

Updating the call to action:

We are issuing a call to action to the world's artificial intelligence experts to develop text and data mining tools that can help the medical community develop answers to high priority scientific questions. The CORD-19 dataset represents the most extensive machine-readable coronavirus literature collection available for data mining to date. This allows the worldwide AI research community the opportunity to apply text and data mining approaches to find answers to questions within, and connect insights across, this content in support of the ongoing COVID-19 response efforts worldwide. There is a growing urgency for these approaches because of the rapid increase in coronavirus literature, making it difficult for the medical community to keep up.

A list of our initial key questions can be found under the Tasks section of this dataset. These key scientific questions are drawn from the NASEM's SCIED (National Academies of Sciences, Engineering, and Medicine's Standing Committee on Emerging Infectious Diseases and 21st Century Health Threats) research topics <link to <a href="https://www.nationalacademies.org/event/03-11-2020/standing-committee-on-emerging-infectious-diseases-and-21st-century-health-threats-virtual-meeting-1<">https://www.nationalacademies.org/event/03-11-2020/standing-committee-on-emerging-infectious-diseases-and-21st-century-health-threats-virtual-meeting-1</a> and the World Health Organization's R&D Blueprint for COVID-19 <link to <a href="https://www.who.int/blueprint/priority-diseases/key-">https://www.who.int/blueprint/priority-diseases/key-</a>

action/Global Research Forum FINAL VERSION for web 14 feb 2020.pdf?ua=1<>. Many of these questions are suitable for text mining, and we encourage researchers to develop text mining tools to provide insights on these questions.

(I see you also have the above acknowledgement on the tasks pages. It seems to me to work better on the landing page in the call to action, per above.)

Throughout the questions, please capitalize "COVID-19".

I'll review again once you have a chance to add the questions.

Thanks again, Lynne

From: Parker, Lynne E. EOP/OSTP (b)(6) Sent: Saturday, March 14, 2020 10:02 AM

To: 'Devvret Rishi' (b)(6		
Cc: Anthony Goldbloom	i <(b)(6)	; Sebastian
Kohlmeier (b)(6)	; Ben Hamner (b)(6)	>; Julia Elliott
<(b)(6)	Parker, Lynne E. EOP/OSTP (b)(6)	>
Subject: RE: [EXTERNAL	] Re: COVID-19 AI Dataset	

Hi Dev,

Many thanks. I will review. On your first point, I'll talk with my WH colleagues and get back with you. I understand your point.

I completely agree on bullet #2. Please work with Sebastian, et al, and feel free to beef up the description with content they suggest for the dataset description.

Also, we have just received the second set of questions – this one from the NASEM's SCEID (National Academies of Science, Engineering, and Medicine's Standing Committee on Emerging Infectious Diseases and 21<sup>st</sup> Century Health Threats), which are now public here: <u>>https://www.nationalacademies.org/event/03-11-2020/standing-committee-on-emerging-infectious-diseases-and-21st-century-health-threats-virtual-meeting-1<</u>. Please add them to the questions you already have from WHO.

As with the WHO questions, these are not framed for text mining. Taking a similar approach that you took for the WHO questions makes sense here, too.

Also, we need to acknowledge the source of these questions. Per one of my earlier notes, at the end of the Call to Action (after the sentence that says "A list of our initial...", please add the following (OK to wordsmith if needed):

"These key scientific questions are drawn from the NASEM's SCIED (National Academies of Sciences, Engineering, and Medicine's Standing Committee on Emerging Infectious Diseases and 21st Century Health Threats) research topics <link to <a href="https://www.nationalacademies.org/event/03-11-2020/standing-committee-on-emerging-infectious-diseases-and-21st-century-health-threats-virtual-meeting-1<">https://www.nationalacademies.org/event/03-11-2020/standing-committee-on-emerging-infectious-diseases-and-21st-century-health-threats-virtual-meeting-1</a> and the World Health Organization's R&D Blueprint for COVID-19 <link to <a href="https://www.who.int/blueprint/priority-diseases/key-action/Global Research Forum FINAL VERSION">https://www.who.int/blueprint/priority-diseases/key-action/Global Research Forum FINAL VERSION for web 14 feb 2020.pdf?ua=1<>."</a>

Thanks, Lynne

 From: Devvret Rishi (b)(6)

 Sent: Saturday, March 14, 2020 3:52 AM

 To: Parker, Lynne E. EOP/OSTP (b)(6)

 Cc: Anthony Goldbloom (b)(6)
 ; Sebastian

 Kohlmeier (b)(6)
 ; Julia Elliott

 (b)(6)
 ; Sebastian

Subject: Re: [EXTERNAL] Re: COVID-19 AI Dataset

Hi Lynne,

The content is ready for your review. You can view the dataset using this link, and see the list of open research questions in the `Tasks` tab (or through this link).

I also had two follow-up questions I wanted to get your thoughts on:

- Anthony pointed out that being more clear that the White House has an interest in the outcome of the work done here could help make this more meaningful for our community and incentivize higher quality engagement. Would we have your permission to add in language such as "The White House has asked us to issue a call to action to the world's artificial intelligence..."? We can take a light touch but mentioning the involvement will likely have an impact.
- The current dataset description is certainly helpful, but it would be great if we could give some additional context on the underlying data to situate users. For example: how was it collected & what criteria we used to determine if research papers belonged to this corpus. If you have one or two more sentences you'd like to add to this effect, I'd be happy to update the description with those details.

Thanks in advance for your review and look forward to hearing any feedback you may have.

Dev

On Fri, Mar 13, 2020 at 7:09 PM Parker, Lynne E. EOP/OSTP (b)(6) wrote:

Hi Dev,

Yes, I very much appreciate your tweaking the language to be more suitable. Please do that, and I'll review.

Thanks again, Lynne

On Mar 13, 2020, at 9:53 PM, Devvret Rishi (b)(6) > wrote:

Hi Lynne,

Thank you very much for the detailed note Lynne, and for sending the updated draft of questions. We have most of the updates to the dataset made (including mirroring the actual data on our platform) and research questions summarized as Tasks. You can see the continued progress on the landing page through this link.

<u>@Paul Mooney</u> and I agreed with your assessment that certain questions were less of a fit for data mining approaches as currently written. We plan to adjust the language to some of them to make them better targeted problem statements for our community. For example, a question on 'Develop animal models and standardize challenge studies' would become "Summarize efforts to develop animal models and standardize challenge studies" to be more tractable to the ML community based on published research. Please let us know if you have any concerns with the approach, and feel free to review any of them under the 'Tasks' tab.

Thanks and looking forward to the launch! Dev

On Fri, Mar 13, 2020 at 2:23 PM Parker, Lynne E. EOP/OSTP (b)(6)

wrote:

Dev, et al,

Sure, sounds good. Please see attached for some of the scientific questions. These will not change, and are based on the WHO COVID 2019 R&D Blueprint. (They're almost the same as the WHO R&D Blueprint, but we did drop one or two that are clearly not text mining questions.) We are still working on getting another set from the National Academies. I was told I would have it about 3 hours ago, but it hasn't shown up yet. I'll send that along as soon as possible.

Note one of the sections of text I provided earlier: "Many of these questions are suitable for text mining, and we encourage researchers to develop text mining tools to provide insights on these questions." Since these are drawn directly from the WHO R&D Blueprint (which isn't just about text mining existing literature), we recognize that some of these questions are likely going to be difficult to answer by text mining existing literature. We considered pruning down the list to those that seem more doable for text mining, but we don't want to preclude the possibility that someone can come up with a creative approach. (Or, maybe awareness of the question is also informative.) So, we've included almost everything from the WHO R&D Blueprint. We value your judgement on this, though. If you think it unwise to include questions that seem difficult to address using text mining from existing literature, we're open to your thoughts.

Thanks. Lynne

From: Devvret Rishi (b)(6)		
Sent: Friday, March 13, 202	0 5:03 PM	
To: Parker, Lynne E. EOP/O	STP(b)(6)	
Cc: Anthony Goldbloom (b)	(6)	; Sebastian
Kohlmeier (b)(6)	Ben Hamner (b)(6)	; Julia Elliott
(b)(6)		
Subject: Re: [EXTERNAL] Re	: COVID-19 AI Dataset	

Thanks Lynne, will make sure to add the updated reference to the roadmap as well.

Through most of this afternoon, we'll be in meetings on how to best host this challenge, create tutorial content etc. I can update the landing page periodically, and have one up with the changes that have been suggested here over email this early evening PST if that works for you? From there, I expect we'll want to continue to refine the copy and will be happy to help making changes there based on feedback from you and Carissa from the Allen Institute.

Do you know when we should expect the finalized draft of questions? Once we have those, Paul will work on creating a Task on the dataset for each question or grouping of questions (some preliminary ones are up now as you may have seen).

Best, Dev

On Fri, Mar 13, 2020 at 1:42 PM Parker, Lynne E. EOP/OSTP (b)(6) wrote:

Dev/Paul,

We would like to add a link or reference to the WHO research roadmap, which is where some of the questions are coming from. See highlighted section below for this info. We will hopefully have a second link from the NASEM to provide soon.

When do you think an updated landing page will be available for us to review?

Lynne

From: Parker, Lynne E. EOP/OSTP (b)(6)	
Sent: Friday, March 13, 2020 1:01 PM	
To: 'Devvret Rishi' (b)(6)	>; Anthony Goldbloom
(b)(6)	
Cc: Sebastian Kohlmeier (b)(6)	; Ben Hamner (b)(6)
Parker, Lynne E. EOP/OSTP (b)(6)	>
Subject: RE: [EXTERNAL] Re: COVID-19 A	Al Dataset

Dev,

Thanks again for the draft. A few notes:

• Let's remove the "sponsored by" language in the header, since it seems to imply financial sponsorship. Would "hosted" make sense?

- Please remove the White House from the header, and remove the WH logo.
- The Chan Zuckerberg Institute should be added in the banner, and add their logo, and reference them in the acknowledgements.
- COVID should be all caps.

- Don't capitalize "pandemic".
- In the Introduction the language should read as follows:

"We are issuing a call to action to the Nation's artificial intelligence experts to develop new text and data mining tools that can help the medical community develop answers to high priority scientific questions. The CORE-19 dataset represents the most extensive machine-readable coronavirus literature collection available for data mining to date. This allows the worldwide AI research community the opportunity to apply text and data mining approaches to find answers to questions within, and connect insights across, this content in support of the ongoing COVID-19 response efforts worldwide."

• Add sentences in the acknowledgements that say: "Thanks also go to the World Health Organization and the National Academies of Sciences, Engineering, and Medicine's Standing Committee on Emerging Infectious Diseases and 21st Century Health Threats for their expert work in defining the scientific questions outlined in this call to challenge. We also thank The White House Office of Science and Technology Policy for initiating and coordinating some of these efforts."

Also, on the questions/tasks, we would like to make the statement below somewhere to provide some context (maybe in an introduction to the tasks):

"Informing this call to action, key scientific questions related to COVID-19 were obtained from the World Health Organization (insert footnote or link to:

>>>>https://www.who.int/blueprint/priority-diseases/key-

As soon as we have final approval for the questions, I'll send them along. I'm hopeful it will be soon.

That's it for now. We'll of course want to iterate on this, and may have more changes later (besides the questions).

Lynne

From: Devvret Rishi (b)(6)		
Sent: Friday, March 13, 2020 4:0	D1 AM	
To: Anthony Goldbloom (b)(6)		
Cc: Sebastian Kohlmeier (b)(6)	; Parker,	Lynne E. EOP/OSTP
(b)(6)	; Kratsios, Michael J. EOP/	OSTP

#### ; Ben Hamner (b)(6)

#### Subject: Re: [EXTERNAL] Re: COVID-19 AI Dataset

Thank you again very much for connecting today and providing a first draft of the research questions you are interested in.

As Anthony mentioned, I wanted to send a prototype of what the data hosting & research questions may look like on Kaggle. Please note that all content is simply a placeholder right now, and will be updated once we have the finalized questions & dataset. We (and you) can also easily dynamically make updates as needed.

- 1. You can access the dataset placeholder page using this link.
- 2. You can then click the 'Tasks' button towards the top to see the list of open research questions for our ML community to answer.
- 3. You can then click on individual tasks to read more, edit descriptions and see any submissions.

I've also included a quick screen recording here that can show you the flow of seeing the dataset, the relevant questions (called Tasks on our platform) and placeholder submissions.

As Anthony mentioned, once we are ready to release this to the public we can also do more work to promote this dataset & questions including a potential prize for strong solutions. Look forward to working with you on this and please let me know if you have any questions.

Thanks, Dev

(b)(6)

On Thu, Mar 12, 2020 at 6:03 PM Anthony Goldbloom (b)(6) wrote:

Lynne, thanks for sharing the questions. Sebastian, nice to connect and to work with you.

Dev cc'd is the owner on our side. As a next step, he's going to share the prototype page (target tonight).

Sebastian, agree it makes sense for us to cross reference each other's websites (our community might like using Semantic Scholar as a tool for exploring the data). As a next step, can you and Dev connect tomorrow to figure out the best way for Kaggle to get dumps of the raw data? We have an API, so ideal would be something programmatic.

On Thu, Mar 12, 2020 at 4:08 PM Sebastian Kohlmeier (b)(6) wrote:

Hi Anthony,

Great to meet you and fantastic to see Kaggle involved in this important effort! From a logistics perspective we plan to publish the dataset along with a description and associated metadata (including licensing information) on this web page (currently just a placeholder until we release the new content). Since Kaggle will be hosting the questions it will probably be easiest for us to cross-link from Semantic Scholar to Kaggle and vice-versa for Monday's release. If that makes sense, it would be great if you could connect me with someone at Kaggle so that we can coordinate tomorrow and ensure that the right links and content are in place.

Thanks again and excited to see this go live on Monday!

Sebastian Kohlmeier

Sr. Manager - Business Operations | Semantic Scholar Allen Institute for AI (AI2) (b)(6)

On Thu, Mar 12, 2020 at 3:46 PM Parker, Lynne E. EOP/OSTP (b)(6) > wrote:

Hi Anthony, et al,

Please find attached a draft set of questions for the Kaggle site. Please treat this as a draft, for the purposes of your creating a prototype site, and don't distribute until we give you the final version. We recognize that this is a long set of questions, but I'm of the opinion that in this current crisis, the more different lines of work that we offer to researchers, the more benefits we might gain. If this presents an unwieldy setup for Kaggle, however, then let me know and we can prune the list (but recognizing that prioritizing which questions are potentially most impactful is very difficult for us to do).

I'm also copying Sebastian Kohlmeier from AllenAl, who can talk with you about the dataset. My understanding is that AllenAl would like to host the data, but would be fine with Kaggle mirroring it.

We would like to go live with this effort on Monday, rather than tomorrow. When do you think you might have a draft site ready for us to review?

Let me know if you need anything else just now. We very much appreciate your help and contribution to this effort!

Lynne

## RE: [EXTERNAL] Re: COVID-19 Open Research Dataset Press Call

From :	"Hernandez, Elena R. EOP/OSTP" (b)	(6)	
То:	Devvret Rishi (b)(6)	, Anthony Goldbloom (b)(6)	
Cc:	"Kratsios, Michael J. EOP/OSTP" (b)(6 EOP/OSTP" (b)(6)	;)	"Parker, Lynne E.
Date:	Sat, 14 Mar 2020 18:55:36 -0400		
Great, th	ank you so much!		
From: De	vvret Rishi (b)(6)		
Sent: Sat	urday, March 14, 2020 6:50 PM		
To: Antho	ony Goldbloom (b)(6)		
Cc: Herna	andez, Elena R. EOP/OSTP (b)(6)	; Kratsio	os, Michael J. EOP/OSTP
(b)(6)	; Parker, Lynr	ne E. EOP/OSTP (b)(6)	
Subject:	Re: [EXTERNAL] Re: COVID-19 Open Res	earch Dataset Press Call	

Thank you Elena, Michael, and Lynne - really looking forward to this launch.

The URL for the dataset and challenges which will be made public on Monday at 2pm EST is: <a href="https://www.kaggle.com/allen-institute-for-ai/CORD-19-research-challenge</a>. We may make a short URL version of this before launch on Monday, in which case I will also circulate that with you asap.

In case you're interested, you can view a staging (not for public release) version of the dataset <u>here</u> and the list of the tasks <u>here</u>. We're reviewing these iteratively with Lynne.

Best, Dev

On Sat, Mar 14, 2020 at 3:38 PM Anthony Goldbloom (b)(6)

wrote:

Elena, adding dev from our team. He can share the URLs with you (to replace the placeholders in the current press release).

On Sat, Mar 14, 2020, 11:04 AM Hernandez, Elena R. EOP/OSTP (b)(6) wrote:

That's perfect, thanks Anthony for the quick turnaround! We are planning for 2pm on Monday for the call.

Will be back in touch soon with more details on the call and the latest version of the press release for your awareness, but let us know if you have any questions in the meantime. I can also be reached at (b)(6)

Elena

Elena Hernandez Press Secretary Office of Science and Technology Policy The White House Desk: (b)(6) | Mobile: (b)(6) (b)(6)

From: Anthony Goldbloom (b)(6)	
Sent: Saturday, March 14, 2020 1:56 PM	
To: Kratsios, Michael J. EOP/OSTP(b)(6)	
Cc: Parker, Lynne E. EOP/OSTP (b)(6)	; Hernandez, Elena R. EOP/OSTP
(b)(6)	
Subject: [EXTERNAL] Re: COVID-19 Open Research Datas	set Press Call

Michael for sure.

Lynne and Elena, as far as quotes are concerned, does this work? I'd plan to say something similar on the teleconference.

"It's difficult for humans to manually go through 24K+ articles and synthesize their findings. Recent advances in the ability of machines to process natural language mean that AI might be helpful here. We're putting this dataset up in front of our community of 4.3MM data scientists in the hope that the world's AI community can help find answers to a key set of questions about COVID-19."

Anthony

On Sat, Mar 14, 2020 at 8:36 AM Kratsios, Michael J. EOP/OSTP (b)(6) > wrote:

Hi Anthony,

We are so grateful for the work by your team to prepare the dataset and tasks for Monday. Having it up on your platform will make a really big difference.

To issue our call to action and raise awareness across both the public and the scientific community, the we are hosting a media briefing call on Monday and putting out a press

release. I plan to give brief remarks and would love to have you dial-in and speak for a minute or two as well on kaggle's roll in this effort. Please let us know if you can join.

Attached is a the draft press release and the comms plan. If you'd like to include a quote, feel free to send it to Lynne and Elena (cced) who are running point on the Monday rollout.

Thanks again for all your help!

Best, Michael

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House o:(b)(6)

## Re: [EXTERNAL] Re: COVID-19 Open Research Dataset Press Call

From :	Devvret Rishi (b)(6)
то:	Anthony Goldbloom (b)(6)
Cc:	"Hernandez, Elena R. EOP/OSTP" (b)(6) "Kratsios, Michael J. EOP/OSTP" (b)(6) "Parker, Lynne E. EOP/OSTP" (b)(6)
Date:	Sat, 14 Mar 2020 18:50:00 -0400
Thank you	Elena, Michael, and Lynne – really looking forward to this launch.
is: >https	for the dataset and challenges which will be made public on Monday at 2pm EST ://www.kaggle.com/allen-institute-for-ai/CORD-19-research-challenge<. We may make a version of this before launch on Monday, in which case I will also circulate that with you asap.
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Elena	
Elena	a Hernandez
	Secretary
	e of Science and Technology Policy
	White House
The	white House

Desk:(b)(6)   Mobile: (b)(6)	
b)(6)	
rom: Anthony Goldbloom (b)(6) Sent: Saturday, March 14, 2020 1:56 PM	
<b>To:</b> Kratsios, Michael J. EOP/OSTP (b)(6)	Herrendez Elene D. EOD/OSTD
Cc: Parker, Lynne E. EOP/OSTP (b)(6) b)(6)	Hernandez, Elena R. EOP/OSTP
Subject: [EXTERNAL] Re: COVID-19 Open Reseau	rch Dataset Press Call
Mishael for our	
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Lynne and Elena, as far as quotes are concerned, doe teleconference.	s this work? I'd plan to say something similar on the
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would love to have you dial-in and speak for a minute or two as well on kaggle's roll in this effort. Please let us know if you can join.

Attached is a the draft press release and the comms plan. If you'd like to include a quote, feel free to send it to Lynne and Elena (cced) who are running point on the Monday roll-out.

Thanks again for all your help!

Best,

Michael

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House o: (b)(6)

## [EXTERNAL] Re: Monday COVID-19 Data/AI Announcement

From :	"Fred Humphries (CELA)" (b)(6)	
То:	"Kratsios, Michael J. EOP/OSTP" <(b)(6) (b)(6)	>, Karan Bhatia
Cc:	"Parker, Lynne E. EOP/OSTP" (b)(6) EOP/OSTP"(b)(6)	>, "Hernandez, Elena R.
Date:	Sat, 14 Mar 2020 16:50:14 -0400	
	kept me in the loop on this announcement, which is it to participate. Thanks	mportant as we deal with the public health issue. We

-Fred Humphries From: Kratsios, Michael J. EOP/OSTP (b)(6) > Sent: Saturday, March 14, 2020 3:31:41 PM To: Karan Bhatia (b)(6) Fred Humphries (CELA) (b)(6) Cc: Parker, Lynne E. EOP/OSTP (b)(6) ; Hernandez, Elena R. EOP/OSTP (b)(6)

Subject: [EXTERNAL] Monday COVID-19 Data/AI Announcement

Hi Karan and Fred,

As was mentioned on the tech call last week, we have been working on releasing a COVID-19 related dataset. This is a first-of-its-kind, full-text, machine readable database of available scholarly literature about coronavirus. On Monday we'll be issuing a call to action to the Nation's artificial intelligence experts to develop new text and data mining tools that can help the scientific community develop answers to high-priority questions related to COVID-19.

There will be a press call at 2pm on Monday. A draft press release is attached.

Fred – I wanted to flag Microsoft Research has been involved and Eric Horvitz has agreed to be on the call and provided a quote.

Karan – I wanted to flag that we have worked with Kaggle who will be hosting a copy of the dataset on their site so their community of data scientists can tackle some key questions re COVID-19. Anthony Goldbloom will join the call and provided a quote.

Other Partners include:

- Allen Institute for Al
- Chan Zuckerberg Initiative
- Georgetown University's Center for Security and Emerging Technology
- NIH National Library of Medicine

Many thanks for all your help! Just wanted to make sure you were in the loop with everything going on. Lynne and Elena (cced) can answer any questions you may have.

Best, Michael

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House o: (b)(6)

## Monday COVID-19 Data/AI Announcement

From:	"Kratsios, Michael J. EOP/OSTP" (b)(6)
То:	Karan Bhatia (b)(6) "Fred Humphries (CELA)" (b)(6)
Cc:	"Parker, Lynne E. EOP/OSTP" (b)(6) >, "Hernandez, Elena R. EOP/OSTP" (b)(6)
Date:	Sat, 14 Mar 2020 15:31:41 -0400
Attachment s:	CORD-19 Dataset Press Release - OSTP AI2 CZI NIH KAGGLE MSFT.docx (21.16 kB)

Hi Karan and Fred,

As was mentioned on the tech call last week, we have been working on releasing a COVID-19 related dataset. This is a first-of-its-kind, full-text, machine readable database of available scholarly literature about coronavirus. On Monday we'll be issuing a call to action to the Nation's artificial intelligence experts to develop new text and data mining tools that can help the scientific community develop answers to high-priority questions related to COVID-19.

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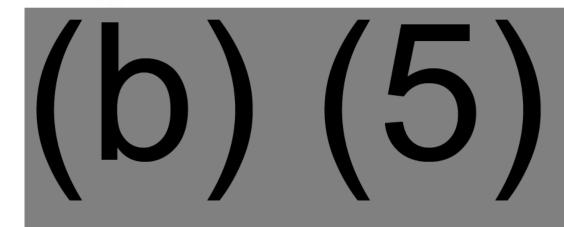
Other Partners include:

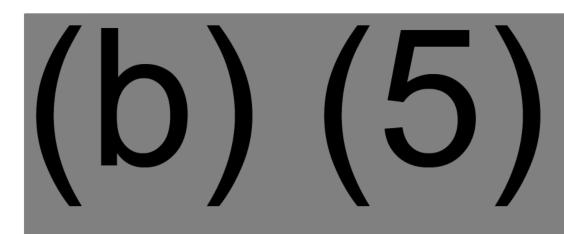
- Allen Institute for Al
- Chan Zuckerberg Initiative
- Georgetown University's Center for Security and Emerging Technology
- NIH National Library of Medicine

Many thanks for all your help! Just wanted to make sure you were in the loop with everything going on. Lynne and Elena (cced) can answer any questions you may have.

Best, Michael

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House o:(b)(6)





DRAFT

## [EXTERNAL] Re: Thank You for Attending White House COVID-19 Tech Meeting

From :	Timothy Powderly (b)(6)	
То:	"Parker, Lynne E. EOP/OSTP" (b)(6)	
Cc:	"Kratsios, Michael J. EOP/OSTP" (b)(6) EOP/OSTP" (b)(6)	"Hernandez, Elena R.
Date:	Sat, 14 Mar 2020 10:21:22 -0400	

### Lynne,

Hope you're well. We've received numerous requests from various entities (CDC, states) to provide support on a range of issues, including software development and hardware donations. At the moment we are working through those requests, as well as working on the items you outlined on our call this week.

I will keep you updated on our progress. However, if there is a priority project the Administration is interested in, please let me know.

Tim

On Mar 11, 2020, at 4:51 PM, Parker, Lynne E. EOP/OSTP (b)(6)

wrote:

Good Afternoon,

Thank you very much for being a part of today's COVID-19 Tech Meeting with The White House. We are appreciative for your expertise and collaboration. We are reaching out separately to entities who will be leading some of the next steps based on today's discussion. We will be connecting with you for continued engagement on these topics very soon. Please see the attached White House press release summarizing what was accomplished today and what is yet to come.

We are grateful for your assistance in our nation's response to COVID-19.

Lynne

Lynne E. Parker, Ph.D. Deputy Chief Technology Officer of the United States The White House

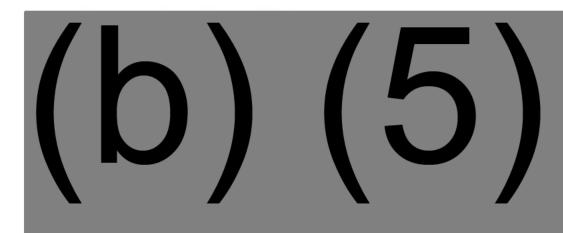
Office: (b)(6)

<Mail Attachment.eml>

## Dataset Comms for Tomorrow

From:	"Hernandez, Elena R. EOP/OSTP" (b)(6)
То:	"Baum, Kristina R. EOP/OSTP" (b)(6)"Bonyun, Sean C.EOP/OSTP" (b)(6)"Watson, Ian D. EOP/OSTP"(b)(6)>, "Waterman, Paige E. EOP/OSTP"(b)(6)>, "Lattimore, Tracie B. EOP/OSTP"(b)(6), "Wallace, Rachel A. EOP/OSTP"
Cc:	"Parker, Lynne E. EOP/OSTP" (b)(6) , "Kratsios, Michael J. EOP/OSTP" <(b)(6)
Date:	Sun, 15 Mar 2020 22:26:53 -0400
Attachment s:	CORD19 Communications.docx (16.32 kB); media-briefing-invite.docx (12.88 kB); CORD-19 Dataset Press Release - Final.docx (31.29 kB)
(b	) (5)
Thank you	이가 있는 것은 것은 것은 것은 것을 가지 않는 것을 것 같아요. 가슴은 가슴에서 가슴을 가지 않는 것 같아요. 가슴을 가지 않는 것 같아요. 

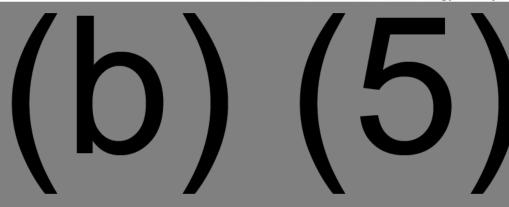
Elena



THE WHITE HOUSE Office of Science and Technology Policy

## (b) (5), (b) (6)

THE WHITE HOUSE Office of Science and Technology Policy



# (b) (5)



For more information about the novel coronavirus and COVID-19, please visit: <u>https://www.cdc.gov/coronavirus</u>

## RE: [EXTERNAL] Re: covid 19 tech

From :	"Parker, Lynne E. EOP/OSTP" (b) (5)	
То:	Daniel Gross (b)(6)	
Cc:	"Kratsios, Michael J. EOP/OSTP" (b)(6) EOP/OSTP" (b)(6)	>, "Parker, Lynne E.
Date:	Sun, 15 Mar 2020 12:41:40 -0400	

Hi Dan,

Great talking with you. Below is the call-in info for the 3PM Eastern call today. I'll also connect you separately to Josh.

Lynne

This event has been	en changed.
COVID-19 Tech When	nology and Research Task Force Sun Mar 15, 2020 12pm – 1pm Pacific Time - Los Angeles
Calendar	(b)(6)
Who	(Guest list has been hidden at organizer's request)
more details » Changed: Join Zoo	om Meeting
(b)(6)	
Meeting ID: (b)(6)	
Password: (b)(6)	
One tap mobile	
+ <mark>(</mark> b)(6)	US (New York)
+(b)(6)	US (San Jose)
Dial by your location	n
(b)(6)	(New York)

+(b)(6)	US (San Jose)
Meeting ID: (b)(6)	
Find your local nu	mber: (b)(6)
Agenda	
3-3:05pm – Natio	nal Science & Technology Policy update
Dr. Lynne Partner	, Deputy CTO, White House Office of Science and Technology Policy
3:05-3:20pm – CE	DC staff on priority needs
	aff, Research Epidemiologist, Applied Research and Modeling Team, Influenza see, Associate Director of Global Health Affairs, Influenza Division
3:20-3:30pm – Ge	eolocation data initiative update
Dr. Caroline Buck	ee, Harvard School of Public Health
3:30-3:35pm – Te	lehealth initiatives update
Adam Greenberg,	General Counsel, Ro
3:35-3:55pm – Re	sourcing
Group discussion	with epidemiology teams on what resources can be marshalled to fulfill needs
3:55-4pm – Next :	steps
Determine next st Going ((b) (6)	eps for each initiative, and industry contributions )? <u>Yes</u> - <u>Maybe</u> - <u>No more options »</u>

From: Daniel Gross (b)(6) Sent: Sunday, March 15, 2020 12:24 PM To: Kratsios, Michael J. EOP/OSTP (b)(6) Cc: Parker, Lynne E. EOP/OSTP (b)(6) Subject: [EXTERNAL] Re: covid 19 tech

Sure thing! Just dial me anytime. My number is (b) (6)

On Sun, Mar 15, 2020 at 6:14 AM Kratsios, Michael J. EOP/OSTP (b)(6) wrote:

Hi Daniel – I lead tech policy at the WH. I know you reached out to Jared yesterday on some ways the tech industry could be helpful.

There is a group of private sector tech companies who have come together to see what data they have (e.g. geolocation, movement) which may be valuable in the modeling. They are doing a call today at 3pm – it may make sense or you to combine efforts.

Do you have some time for a quick call with me or Lynne (our Dep US CTO) today?

Best, Michael

Michael Kratsios Chief Technology Officer of the United States The White House o: (b)(6) m: (b)(6)

## RE: [EXTERNAL] Re: COVID-19 Open Research Dataset Press Call

From :	"Hernandez, Elena	R. EOP/OSTP"(b)(6)	
То:	Pete Voss (b)(6)		
Cc:	Anthony Goldbloon (b)(6) EOP/OSTP'''(b)(6) <(b)(6)	h (b)(6) Pablo Chavez Devvret Rishi <(b)(6) "Kratsios, Michael J. .gov>, "Parker, Lynne E. EOP/OSTP"	
Date:	Sun, 15 Mar 2020	12:38:07 -0400	
That wor	ks for us – thanks! W	/ill make sure that's reflected.	
Sent: Sun	te Voss <mark>(b)(6)</mark> Iday, March 15, 2020 andez, Elena R. EOP/		
Cc: Antho	ony Goldbloom (b)(6)	Pablo Chavez (b)(6) ; Devv	/ret
Rishi (b)(6	5)	; Kratsios, Michael J. EOP/OSTP < Michael.J.Kratsios@ostp.eop.gov>;	

Parker, Lynne E. EOP/OSTP (b)(6)

Subject: Re: [EXTERNAL] Re: COVID-19 Open Research Dataset Press Call

Thank you, Elena. I'm adding <u>+Pablo Chavez</u> from our Google Cloud policy team for visibility.

We would like to include the fact that Kaggle is owned by Google Cloud. Can we make the below edit to the Kaggle mention in the press release?

"Through Kaggle, a machine learning and data science community owned by Google Cloud, these tools will be openly available for all researchers, including the medical research community."

## On Sun, Mar 15, 2020 at 8:25 AM Hernandez, Elena R. EOP/OSTP (b)(6) wrote:

Good morning Kaggle team – here's the latest version of the press release tomorrow. We are only waiting on a quote from Georgetown. Will be sure to let you know once we finalize. Thanks!

From: Anthony Goldbloom (b)(6)	
Sent: Saturday, March 14, 2020 11:39 PM	Strate State Stat
To: Devvret Rishi (b)(6)	
Cc: Hernandez, Elena R. EOP/OSTP (b)(6)	Kratsios, Michael J.
EOP/OSTP (b)(6)	; Parker, Lynne E. EOP/OSTP

(b)(6) ; Pete Voss (b)(6) > Subject: Re: [EXTERNAL] Re: COVID-19 Open Research Dataset Press Call

Elena, some small changes to my quote.

"It's difficult for people to manually go through more than 20,000 articles and synthesize their findings. Recent advances in technology can be helpful here. We're putting machine readable versions of these articles in front of our community of more than 4 million data scientists. Our hope is that AI can be used to help find answers to a key set of questions about COVID-19."

Also adding Pete from Google's comms team.

Anthony

On Sat, Mar 14, 2020 at 3:50 PM Devvret Rishi (b)(6) wrote:

Thank you Elena, Michael, and Lynne - really looking forward to this launch.

The URL for the dataset and challenges which will be made public on Monday at 2pm EST is: >>https://www.kaggle.com/allen-institute-for-ai/CORD-19-research-challenge<<;. We may make a short URL version of this before launch on Monday, in which case I will also circulate that with you asap.

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Best, Dev

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Elena, adding dev from our team. He can share the URLs with you (to replace the placeholders in the current press release).

On Sat, Mar 14, 2020, 11:04 AM Hernandez, Elena R. EOP/OSTP (b)(6) wrote:

That's perfect, thanks Anthony for the quick turnaround! We are planning for 2pm on Monday for the call.

Will be back in touch soon with more details on the call and the latest version of the press release for your awareness, but let us know if you have any questions in the meantime. I can also be reached at (b)(6)

Elena

Elena Hernandez Press Secretary Office of Science and Technology Policy

The White House Desk: (b)(6) (b)(6)	Mobile:(b)(6)	
From: Anthony Gold		
Sent: Saturday, Marc	ch 14, 2020 1:56 PM	
To: Kratsios, Michael	J. EOP/OSTP (b)(6)	
Cc: Parker, Lynne E. I	EOP/OSTP(b)(6)	Hernandez, Elena R.
EOP/OSTP (b)(6)		

Subject: [EXTERNAL] Re: COVID-19 Open Research Dataset Press Call

Michael for sure.

Lynne and Elena, as far as quotes are concerned, does this work? I'd plan to say something similar on the teleconference.

"It's difficult for humans to manually go through 24K+ articles and synthesize their findings. Recent advances in the ability of machines to process natural language mean that AI might be helpful here. We're putting this dataset up in front of our community of 4.3MM data scientists in the hope that the world's AI community can help find answers to a key set of questions about COVID-19."

Anthony

On Sat, Mar 14, 2020 at 8:36 AM Kratsios, Michael J. EOP/OSTP (b)(6) > wrote:

Hi Anthony,

We are so grateful for the work by your team to prepare the dataset and tasks for Monday. Having it up on your platform will make a really big difference.

To issue our call to action and raise awareness across both the public and the scientific community, the we are hosting a media briefing call on Monday and putting out a press release. I plan to give brief remarks and would love to have you dial-in and speak for a minute or two as well on kaggle's roll in this effort. Please let us know if you can join.

Attached is a the draft press release and the comms plan. If you'd like to include a quote, feel free to send it to Lynne and Elena (cced) who are running point on the Monday roll-out.

Thanks again for all your help!

Best, Michael

--

Michael Kratsios Deputy Assistant to the President Chief Technology Officer of the United States The White House o: (b)(6)

Pete Voss (b)(6) Communications Lead, AI/ML P (b)(6)

## [EXTERNAL] five reading links for March

From:"Auren Hoffman (Five Links)" (b)(6)To:"Kratsios, Michael J. EOP/OSTP" (b)(6)Date:Sun, 15 Mar 2020 12:15:32 -0400

hello Michael... if you are stuck at home due to Coronavirus, here are five links worth reading ...

## Bonus: Coronavirus Tech Handbook & COVID-19 Readings

These are open-sourced Google Docs for scholars, researchers, data scientists, and medical personnel. It links out to models, information, and more about the spread of COVID-19. In addition, this is a good <u>COVID-19 dashboard</u>.

Metternich by Wolfram Siemann book review by Ferdinand Mount

Who are the important 19th Century people to study? Certainly one can make the case that Metternich was in the top ten. This book review is so good, you might even be able to skip the book.

Why "Exit Transparency" Can Make Companies Stronger by Auren Hoffman Your best-performing employee will eventually leave, either to start their own business or work for another company. One of the best things a one can do to manage exits is to have a blanket, well-defined "Exit Transparency" everyone in the company.

<u>The Gambler Who Cracked the Horse-Racing Code</u> by Kit Chellel A wild tale of a gambler that might have made a \$1 billion on algorithmically betting on the horses in Hong Kong.