

June 30, 2022

National AI Research Resource Task Force Attn: Ms. Jeri Hessman, NCO, NITRD Program 2415 Eisenhower Avenue Alexandria, VA 22314 (202) 459-9683

## VIA ELECTRONIC SUBMISSION

Request for Information (RFI) on Implementing Initial Findings and Recommendations of Re: the National Artificial Intelligence Research Resource Task Force

Engine is a non-profit technology policy, research, and advocacy organization that bridges the gap between policymakers and startups. Engine works with government and a community of thousands of high-technology, growth-oriented startups across the nation to support the development of technology entrepreneurship through economic research, policy analysis, and advocacy on local and national issues. Emerging technologies like artificial intelligence are being developed and utilized by startups to solve problems across a range of industries—from cybersecurity to agriculture and beyond. Accordingly, we appreciate the Task Force's iterative process and opportunity to comment on the development of NAIRR and the Interim Report.

## I. The NAIRR user base must be broadened to include a more diverse group of startups (Topic A).

Expanding access and lowering barriers to AI research—including for private entities like startups—are goals of the NAIRR and its original sponsors in Congress, but the user base as currently envisioned may exclude many startups that should be beneficiaries and have access to the NAIRR. The Interim Report outlines that only startups "that have been awarded Federal grants via the Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR), or other similar Federal programs for small businesses..." will have full access to the NAIRR.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> The strategic objective of the NAIRR reflected in the interim report is to "strengthen and democratize the U.S. AI innovation ecosystem," of which startups must necessarily be a part. Envisioning a National Artificial Intelligence Research Resource (NAIRR): Preliminary Findings and Recommendations, NAIRR Task Force (May 2022), https://www.ai.gov/wp-content/uploads/2022/05/NAIRR-TF-Interim-Report-2022.pdf; see also e.g., 166 Cong. Rec. H3501 (Jul. 20, 2020) (statement of Rep. Eshoo) and 166 Cong. Rec. H6932 (Dec. 8, 2020)

<sup>(</sup>statement of Rep. Eshoo).

<sup>&</sup>lt;sup>2</sup> See Interim Report, supra note 1.

The SBIR and STTR programs, while helpful for startups that receive them, can be insular, struggle with representation, and have long timelines that might not best suit startups that could benefit from access to the NAIRR. SBIR recipients broadly have raised this concern in the past. For example, Neil Ray, an SBIR awardee and the Founder & CEO of San Ramon, California-based Raydiant Oximetry notes that while integral for his company, the program's "timeline doesn't work for startups that need to act quickly," and discusses the insular, academic nature of the grant program that could exclude some founders without access to those networks. And the application-based method of (less than full) access to the NAIRR for those who are not federal grantees would likely face similar challenges for the timeline necessary in order to be useful for fast-moving startups.

Federal grant programs, including SBIR and STTR, have historically struggled to be demographically representative, meaning their use as grant of access to the NAIRR may exclude those for whom the resource is designed to democratize access to AI research. While reflective of larger societal issues with diversity in business ownership (and noting quality of demographic data may be lessened due to self-reporting), just 13.3% of all SBIR grants from 2011-2018 were awarded to companies led by women.<sup>4</sup> Similarly low numbers of grants go to minority-owned companies.<sup>5</sup>

And companies that have said the NAIRR would benefit them would likely not have access based upon their non-grantee status. For example, the startup Beehero, who responded to the NAIRR RFI in Fall 2021 and relayed such a message, does not appear to be a recipient of SBIR, STTR or other federal grant based on public information.<sup>6</sup>

Access to the NAIRR is important for startups, because, as Engine highlighted in our initial comments to the Task Force, AI research and development can be prohibitively expensive and out of reach for many startups operating on resource-limited budgets. This makes the establishment of the NAIRR an opportunity to foster competition and innovation by creating opportunities for startups to work in the AI space without incurring all of the R&D costs associated with AI development. But the NAIRR will only be successful in meeting those ends if it includes a sufficiently broad group of users—including those in the startup ecosystem—and access is granted in a way that is not cumbersome and sufficiently quick for startups.

<sup>&</sup>lt;sup>3</sup> #StartupsEverywhere Profile: Neil P. Ray, MD, Founder & CEO, Raydiant Oximetry, Engine (May 27, 2022), https://www.engine.is/news/startupseverywhere-sanramon-ca-raydiantoximetry.

<sup>&</sup>lt;sup>4</sup> Jenny Servo, et al., Women's Inclusion in Small Business Innovation Research & Small Business Technology Transfer Programs, Americas Seed Fund, 16 (Aug 2020),

https://cdn.www.nwbc.gov/wp-content/uploads/2020/08/11124006/Women-In-SBIR-Report NWBC Final 2020-08-07.pdf.

<sup>&</sup>lt;sup>5</sup> See, e.g., Assessment of the SBIR and STTR Programsat the National Institutes of Health National Academies of Sciences, Engineering, and Medicine, 118, https://nap.nationalacademies.org/read/26376/chapter/6#118.

<sup>&</sup>lt;sup>6</sup> Request for Information (RFI) on an Implementation Plan for a National Artificial Intelligence Research Resource, BeeHero, (Sept 30, 2021),

https://www.ai.gov/rfi/2021/86-FR-39081/BeeHero-NAIRR-RFI-2021.pdf.

<sup>&</sup>lt;sup>7</sup> Engine, RFI Response: National AI Research Resource (NAIRR), (Sept. 1, 2021), https://www.ai.gov/rfi/2021/86-FR-39081/Engine-NAIRR-RFI-2021.pdf.

## II. Options for broader inclusivity of startup participants in the NAIRR (Topic A).

To broaden inclusivity of the NAIRR and enable startup participation, the task force may consider leveraging entities with local knowledge of startups and, separately, develop a vetting procedure to allow full access to the NAIRR that is timely while recognizing legitimate security concerns.

Many startup communities are anchored by entrepreneur support organizations (ESOs), like co-working spaces, incubators, or accelerators—most of which are organized as not-for-profit. These organizations are trusted by startups and disseminate important information and resources to them. At the same time, ESOs also have deep knowledge of the companies they work with and support. Vetting ESOs to clear access based upon their local knowledge of startups would reduce the number of organizations in need of scrutiny by administrators of the NAIRR by distributing responsibilities for allowing access, and would speed access for startups.

University innovation centers serve as anchoring ESOs for some startup ecosystems. While they tend to be more insular than other ESOs, given NAIRR's nexus to universities, it may be worthwhile to consider leveraging these centers to facilitate startup access.

Finally, the NAIRR Task Force could conceive of its own unique vetting process for granting full access to the resource. While recognizing legitimate security concerns, the process must be quick, accessible, and understandable, so as not to discourage startups from seeking the resources at the outset.

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Thank you for the opportunity to provide these comments regarding access to the NAIRR. Engine remains committed to engaging with the Task Force and stands ready to be a resource in thinking through ways to support innovators and startups across the country advancing AI research.

Engine 700 Pennsylvania Ave. SE Washington, DC 20003