

Internet Association



April 14, 2021

The Honorable Jeanne Shaheen Chairwoman Subcommittee on Commerce, Justice, Science, & Related Agencies Senate Committee on Appropriations SH-125 Washington, D.C. 20510

The Honorable Jerry Moran Ranking Member Subcommittee on Commerce, Justice, Science, & Related Agencies Senate Committee on Appropriations SD-142 Washington, D.C. 20510 The Honorable Matt Cartwright Chairman Subcommittee on Commerce, Justice, Science, & Related Agencies House Committee on Appropriations H-310 The Capitol Washington, D.C. 20515

The Honorable Robert Aderholt Ranking Member Subcommittee on Commerce, Justice, Science, & Related Agencies House Committee on Appropriations 1016 Longworth House Office Building Washington, D.C. 20515

Dear Chairwoman Shaheen, Chairman Cartwright, Ranking Members Moran and Aderholt:

On behalf of the undersigned industry associations, representing many of the nation's largest contributors to the research and development involved in advancing our national economy and industry innovation, we write to express our strong support for modernizing the IT infrastructure of the laboratories and facilities at the National Institute of Standards and Technology (<u>NIST</u>) -- an agency that will be essential in maintaining American leadership in emerging technologies.

While Congress has tasked NIST to develop the standards, guidelines, and associated methods and techniques for testing and benchmarking accuracy and bias in facial recognition software products, NIST can also make further progress in testing algorithms in a manner in which they are often deployed by government agencies - in cloud computing environments. NIST has the potential to expand its testing infrastructure to include testing algorithms in the cloud, within their testing protocols. By cohesively integrating cloud-based testing into NIST's existing Face Recognition Vendor Test (FRVT), NIST researchers will strengthen its FRVT program and continue its mission in providing objective, high-quality facial recognition test data that can be leveraged by the federal government and commercial sector.

We urge you to provide full and robust funding support for the staff, equipment, and facilities responsible for performing the FRVT within the Information Technology Lab (ITL) at NIST.

In its current state, NIST's FRVT team is unable to perform the full potential scope of its important

assessments due to technical lab and personnel limitations. Report language that is focused on providing NIST with the tools and talent necessary to expand its testing will ensure the program is able to produce essential national standards for this form of technology.

The ITL is one of six NIST laboratories, with ITL having a remit over "IT measurements, testing, and standards," including those involving facial recognition. The FRVT project, housed within the Image Group of ITL's Information Access Division, is responsible for performing tests and experiments necessary to develop universally recognized standards and guidance on how facial recognition technology can be implemented going forward. NIST does this by running facial recognition algorithms that are voluntarily provided by various organizations against a series of tests that are designed to determine the accuracy, speed, and quality of their results. Recent tests by the FRVT team have involved the ability of submitted algorithms to properly detect faces that are obscured by masks as well as ensuring the results are mitigating bias.

The cutting edge nature of this technology is of particular importance, with advances made on a regular basis. In fact, NISTIR 8280¹, entitled "FRVT Part 3: Demographic Effects" and released in December of 2019, stated that it was "the first to describe demographic differentials for identification algorithms."² Similarly, NISTIR 8331³, entitled "Ongoing Face Recognition Vendor Test (FRVT) Part 6B: Face recognition accuracy with face masks using post-COVID-19 algorithms," and released in November of 2020, stated that it was only the second report to test the ability of facial recognition technology to accurately identify individuals wearing masks, with the first test's results having been released in July of 2020.⁴

Ensuring NIST has the IT infrastructure and support necessary to establish standards and guidance will provide the FRVT team and policymakers with crucial information by continuing to expand the scope and depth of testing face recognition products.

We thank you for your consideration and we look forward to working with you as the appropriation process continues.

Sincerely,

Alliance for Digital Innovation Internet Association Security Industry Association U.S. Chamber Technology Engagement Center

¹ See NISTIR 8280, <u>https://nvlpubs.nist.gov/nistpubs/ir/2019/NIST.IR.8280.pdf</u>, (December 19, 2019) ² Id., Page 8

³ See NISTIR 8331, <u>https://nvlpubs.nist.gov/nistpubs/ir/2020/NIST.IR.8331.pdf</u> (November 30, 2020)

⁴ See NISTIR 8311, <u>https://nvlpubs.nist.gov/nistpubs/ir/2020/NIST.IR.8311.pdf</u> (July 24, 2020)