

(4) research on public understanding and awareness of manipulated and synthesized content, including research on best practices for educating the public to discern authenticity of digital content; and

(5) research awards coordinated with other federal agencies and programs, including the Defense Advanced Research Projects Agency and the Intelligence Advanced Research Projects Agency, with coordination enabled by the Networking and Information Technology Research and Development Program.

SEC. 4. NIST SUPPORT FOR RESEARCH AND STANDARDS ON GENERATIVE ADVERSARIAL NETWORKS.

(a) *IN GENERAL.*—The Director of the National Institute of Standards and Technology shall support research for the development of measurements and standards necessary to accelerate the development of the technological tools to examine the function and outputs of generative adversarial networks or other technologies that synthesize or manipulate content.

(b) *OUTREACH.*—The Director of the National Institute of Standards and Technology shall conduct outreach—

(1) to receive input from private, public, and academic stakeholders on fundamental measurements and standards research necessary to examine the function and outputs of generative adversarial networks; and

(2) to consider the feasibility of an ongoing public and private sector engagement to develop voluntary standards for the function and outputs of generative adversarial networks or other technologies that synthesize or manipulate content.

SEC. 5. REPORT ON FEASIBILITY OF PUBLIC-PRIVATE PARTNERSHIP TO DETECT MANIPULATED OR SYNTHESIZED CONTENT.

Not later than 1 year after the date of enactment of this Act, the Director of the National Science Foundation and the Director of the National Institute of Standards and Technology shall jointly submit to the Committee on Science, Space, and Technology of the House of Representatives, the Subcommittee on Commerce, Justice, Science, and Related Agencies of the Committee on Appropriations of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Subcommittee on Commerce, Justice, Science, and Related Agencies of the Committee on Appropriations of the Senate a report containing—

(1) the Directors' findings with respect to the feasibility for research opportunities with the private sector, including digital media companies to detect the function and outputs of generative adversarial networks or other technologies that synthesize or manipulate content; and

(2) any policy recommendations of the Directors that could facilitate and improve communication and coordination between the private sector, the National Science Foundation, and relevant Federal agencies through the implementation of innovative approaches to detect digital content produced by generative adversarial networks or other technologies that synthesize or manipulate content.

SEC. 6. GENERATIVE ADVERSARIAL NETWORK DEFINED.

In this Act, the term “generative adversarial network” means, with respect to artificial intelligence, the machine learning process of attempting to cause a generator artificial neural network (referred to in this paragraph as the “generator”) and a discriminator artificial neural network (referred to in this paragraph as a “discriminator”) to compete against each other to become more accurate in their function and outputs, through which the generator and discriminator create a feedback loop, causing the generator to produce increasingly higher-quality artificial outputs and the discriminator to increasingly improve in detecting such artificial outputs.

Mr. McCONNELL. I ask unanimous consent that the committee-reported substitute be agreed to; that the bill, as amended, be considered read a third time and passed; and that the motion to reconsider be considered made and laid upon the table.

The PRESIDING OFFICER. Without objection, it is so ordered.

The committee-reported amendment in the nature of a substitute was agreed to.

The bill (S. 2904), as amended, was ordered to be engrossed for a third reading, was read the third time, and passed.

NATIONAL NATIVE AMERICAN HERITAGE MONTH

Mr. McCONNELL. Mr. President, I ask unanimous consent that the Senate proceed to consideration of S. Res. 779, submitted earlier today.

The PRESIDING OFFICER. Without objection, it is so ordered.

The clerk will report the resolution by title.

The senior assistant legislative clerk read as follows:

A resolution (S. Res. 779) recognizing National Native American Heritage Month and celebrating the heritages and cultures of Native Americans and the contributions of Native Americans to the United States.

There being no objection, the Senate proceeded to consider the resolution.

Mr. McCONNELL. I ask unanimous consent that the resolution be agreed to; that the preamble be agreed to; and that the motions to reconsider be considered made and laid upon the table with no intervening action or debate.

The PRESIDING OFFICER. Without objection, it is so ordered.

The resolution (S. Res. 779) was agreed to.

The preamble was agreed to.

(The resolution, with its preamble, is printed in today's RECORD under “Submitted Resolutions.”)

ORDERS FOR FRIDAY, NOVEMBER 20, 2020, THROUGH MONDAY, NOVEMBER 30, 2020

Mr. McCONNELL. Mr. President, I ask unanimous consent that when the Senate completes its business today, it adjourn to then convene for pro forma sessions only, with no business being conducted, on the following dates and times, and that following each pro forma session, the Senate adjourn until the next pro forma session: Friday, November 20, at 8:15 a.m.; Tuesday, November 24, at 12:15 p.m.; Friday, November 27, at 3:15 p.m. I further ask that when the Senate adjourns on Friday, November 27, it next convene at 3 p.m., Monday, November 30; that following the prayer and pledge, the morning hour be deemed expired, the Journal of proceedings be approved to date, and the time for the two leaders be reserved for their use later in the day; further, that following leader remarks, the Senate be in a period of

morning business, with Senators permitted to speak therein for up to 10 minutes each; further, that at 5 p.m. the Senate proceed to executive session to resume the McNeel nomination under the previous order. Finally, I ask that the cloture motions filed during today's session of the Senate ripen following disposition of the McNeel nomination.

The PRESIDING OFFICER. Without objection, it is so ordered.

ADJOURNMENT UNTIL FRIDAY, NOVEMBER 20, 2020, AT 8:15 A.M.

Mr. McCONNELL. Mr. President, if there is no further business to come before the Senate, I ask unanimous consent that it stand adjourned under the previous order.

There being no objection, the Senate, at 6:34 p.m., adjourned until Friday, November 20, 2020, at 8:15 a.m.

NOMINATIONS

Executive nominations received by the Senate:

IN THE AIR FORCE

THE FOLLOWING AIR NATIONAL GUARD OF THE UNITED STATES OFFICERS FOR APPOINTMENT IN THE RESERVE OF THE AIR FORCE TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTIONS 12203 AND 12212:

To be major general

BRIG. GEN. PATRICK J. COBB
BRIG. GEN. NICHOLAS A. GENTILE, JR.
BRIG. GEN. MICHAEL T. GEROCK
BRIG. GEN. DUKE A. PIRAK
BRIG. GEN. DARRIN E. SLATEN

THE FOLLOWING AIR NATIONAL GUARD OF THE UNITED STATES OFFICERS FOR APPOINTMENT IN THE RESERVE OF THE AIR FORCE TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTIONS 12203 AND 12212:

To be major general

BRIG. GEN. MATTHEW D. DINMORE
BRIG. GEN. GENE W. HUGHES, JR.
BRIG. GEN. TONI M. LORD
BRIG. GEN. PETER NEZAMIS
BRIG. GEN. GREGG A. PEREZ
BRIG. GEN. THOMAS M. SUELZER
BRIG. GEN. MARK A. WEBER

THE FOLLOWING AIR NATIONAL GUARD OF THE UNITED STATES OFFICERS FOR APPOINTMENT IN THE RESERVE OF THE AIR FORCE TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTIONS 12203 AND 12212:

To be major general

BRIG. GEN. SANDRA L. BEST
BRIG. GEN. CHARLES G. JEFFRIES
BRIG. GEN. JAMES C. MCEACHEN
BRIG. GEN. SHANNA M. WOYAK
BRIG. GEN. BRETT A. WYRICK

THE FOLLOWING AIR NATIONAL GUARD OF THE UNITED STATES OFFICERS FOR APPOINTMENT IN THE RESERVE OF THE AIR FORCE TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTIONS 12203 AND 12212:

To be major general

BRIG. GEN. JAMES R. CAMP
BRIG. GEN. THOMAS F. GRABOWSKI
BRIG. GEN. PAUL E. KNAPP
BRIG. GEN. RICHARD R. NEELY
BRIG. GEN. TORRENCE W. SAXE

THE FOLLOWING AIR NATIONAL GUARD OF THE UNITED STATES OFFICER FOR APPOINTMENT IN THE RESERVE OF THE AIR FORCE TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTIONS 12203 AND 12212:

To be major general

BRIG. GEN. BARRY A. BLANCHARD

THE FOLLOWING AIR NATIONAL GUARD OF THE UNITED STATES OFFICER FOR APPOINTMENT IN THE RESERVE OF THE AIR FORCE TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTIONS 12203 AND 12212:

To be brigadier general

COL. TARA D. MCKENNIE

THE FOLLOWING AIR NATIONAL GUARD OF THE UNITED STATES OFFICERS FOR APPOINTMENT IN THE RESERVE OF THE AIR FORCE TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTIONS 12203 AND 12212:

To be brigadier general

COLONEL MATTHEW A. BARKER