NOAA and Google Collaborate to Enhance Weather Forecasting and Research with Artificial Intelligence

Public-private partnership between NOAA and Google taps into AI technology to more effectively use satellite and environmental data to improve weather forecasting

Washington, October 27, 2020 -- NOAA's Satellite and Information Service (NESDIS) has signed an agreement with Google to explore the benefits of Artificial Intelligence (AI) and Machine Learning (ML) for enhancing NOAA's use of satellite and environmental data.

Under this three-year Other Transaction Authority (OTA) agreement, NESDIS and Google will pilot specific AI- and ML-related projects to amplify NOAA's environmental monitoring, weather forecasting, climate research, and technical innovation.

"Strengthening NOAA's data processing through the use of big data, artificial intelligence, machine learning, and other advanced analytical approaches is critical for maintaining and enhancing the performance of our systems in support of public safety and the economy," said Neil Jacobs, Ph.D., acting NOAA administrator. "I am excited to utilize new authorities granted to NOAA to pursue cutting-edge technologies that will enhance our mission and better protect lives and property."

Research will initially focus on developing small-scale AI/ML systems. With the results yielded from those efforts, NOAA and Google Cloud will then focus on executing full-scale prototypes that NOAA could ultimately operationalize across its organization. If successful, this has the potential to be a significant leap in NOAA's ability to leverage the enormous volume and diversity of environmental data in order to enhance prediction, including for extreme weather events such as hurricanes and tornadoes.

"By bringing together NOAA and Google's expertise and talent, we can both resource and jointly explore AI/ML methods to achieve a more effective use of satellite and other environmental data," said Mike Daniels, vice president, Global Public Sector, Google Cloud. "Our goal is to increase scientific impact, and improve the efficiency and effectiveness of environmental and satellite data by leveraging Google Cloud's infrastructure and AI/ML know-how. All this will help improve weather forecasting, research and unlock innovation."

Through this agreement, NOAA and Google will work together on a number of projects, offering hands-on AI training opportunities to the NOAA workforce. NOAA's AI strategy aims to infuse new technologies and approaches to increase efficiency and skills through partnerships, training, and AI-related research and development.

NOAA developed an AI/ML strategy and a Data Strategy to dramatically accelerate the use of data across the agency and with other key partners, maximize openness and transparency, deliver on mission, and steward resources while protecting quality, integrity, security, privacy, and confidentiality.

Learn more about NOAA's AI strategy for optimizing our systems and processes.

Learn more about NOAA's Data Strategy for maximizing the value of data.

Learn more about NOAA NESDIS.

About Google Cloud

Google Cloud provides organizations with leading infrastructure, platform capabilities, and industry solutions. We deliver enterprise-grade cloud solutions that leverage Google's cutting-edge technology to help companies operate more efficiently and adapt to changing needs, giving customers a foundation for the future. Customers in more than 150 countries turn to Google Cloud as their trusted partner to solve their most critical business problems.

---

https://www.googlecloudpresscorner.com/2020-10-27-NOAA-and-Google-Collaborate-to-Enhance-Weather-Forecasting-and-Research-with-Artificial-Intelligence