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NPS IT Secures $1 Million Grant to Expand HPC Capabilities

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By Joan Ackerman

Dr. Jeff Haferman, left, Information Technology and Communications Services (ITACS) Director of High-Performance Computing (HPC), and Joe LoPiccolo, Chief Information Officer and ITACS Director, right, have helped a team of data science experts at NPS secure nearly $1 million in funding from the High-Performance Computing (HPC) Modernization Program for an ambitious big data analytics project dubbed the Data Analysis of Real Time Streams (DARTS).

To provide the capabilities necessary to support DARTS, improvements needed to be made to the university’s supercomputing cluster, Hamming. During the past quarter, ITACS has collocated the hardware for the new system with Hamming, and have fused its current software code with Apache Hadoop and NPS-developed government software, with testing currently underway.

"Borrowing Hamming’s infrastructure and integrating the supercomputer’s functionalities with the Hadoop system will allow DARTS investigators to conduct big data analytical approaches, real-time processing of streaming data, and offline analysis of historical data. This type of work would have been virtually impossible prior to the DARTS award," said Haferman.

Data science and data analytics are emerging capabilities that can provide DOD and DON decision-makers with a wealth of information to help reduce costs and improve operational efficiency.

"Our shared vision is to create new foundations for computing to make the imaginable unstoppable," said LoPiccolo. "HPC computing services have already significantly improved our efforts, but the DARTS project will propel NPS to the forefront in processing massive data in real-time, and in providing ground-breaking results that will help enable our warfighters today and into the future," said LoPiccolo.

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March 1, 2016
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the future."

For more information about NPS data science, and the DARTS effort, visit https://my.nps.edu/web/data-sciences.

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