



## PROFILE

Joint Simulation Environment Technical Lead  
Naval Air Warfare Center Aircraft Division

## CITATION

For technical contributions, expertise, and software development in the area of mission systems modeling and simulation and exceptional service to the U.S. Navy

# CAO Q. NGUYEN

## Asian American Engineer of the Year

Mr. Cao Nguyen started his career as a software engineer for Northrop Grumman at Patuxent River, Maryland, in August 2000. There, he led the development of the Command and Control Warfare (C2W) variant High Level Architecture (HLA) Simulation Program in support of the F-18 variant. He also participated on the Integrated Product Team in developing the Improved Capability (ICAP III) program that upgraded the U.S. Navy EA-6B Prowler electronic attack aircraft. Mr. Nguyen also supported the Multifunctional Information Distribution System (MIDS) data-link terminal program.

He began his government career at NAWCAD in 2007 as the Modeling and Simulation Enterprise Applications Team Technical Lead. He and his team established common software management processes and delivered software products including the Next Generation Threat System (NGTS), Architecture Management Integration Environment (AMIE) and Common Development Environment (CDE) and other products used for training, research and development, test and evaluation and analysis. In this position, Mr. Nguyen mentored and led a team of over 140 software developers in eight different locations across the U.S.

Mr. Nguyen rapidly rose to prominence on the Next Generation Threat System (NGTS) Team. The application is a large suite of software tools that provide the environment for military pilot training and post-mission debriefing and replaying and analyzing data. Mr. Nguyen became the team lead after only two years on the project. He guided the design of the NGTS re-architecture making the application far more capable, reliable and maintainable. Mr. Nguyen led the 20-member NGTS team, which ranged in skills from entry level to advanced, and led them through the software engineering process to ensure delivery of an exceptional product to over 100 sites across the world in support of the U.S. Navy, Air Force, and several foreign allies.

In January 2019, Mr. Nguyen was selected by the F-35 Joint Program Office to assist the Navy's Joint Simulation Environment (JSE) development team in completing the integration of Lockheed Martin's high fidelity F-35 in-a-box (FIAB), a high-level project that will allow testing against dense surface and air threats.

Mr. Nguyen received his bachelor's in Computer Science from Virginia Polytechnic Institute and State University in 2000, and his Modeling and Simulation Masters Certificate from Old Dominion University in 2015.

