

Biography: Dr. Bradley D. Taylor

Growing up in the California's San Joaquin Valley, Professor Brad Taylor completed his Bachelor of Science in Control Systems Engineering from the U.S. Naval Academy in Annapolis, Maryland. Subsequent career moves brought him back to the San Diego and Bay Area of California as well as to Connecticut and Georgia. Presently he resides in the greater Washington, DC, area of Maryland.

After nuclear power and submarine training, Dr. Taylor flew four submarines in the Atlantic, Pacific and Mediterranean over the course of a decade, with operational, maintenance, testing and modernization roles including Sonar Officer, Reactor Controls Assistant, Damage Controls Assistant and Navigator and staff positions in Materials, Operations, Communications, Planning and Training. This included exposure to engineered acoustic, optical, computing, pneumatic, hydraulic, nuclear, electrical (generation, distribution and storage), combustion, ballasting, inertial, satellite, weapons and information management systems – both analog and digital – in the submarine universe.

His ensuing industry and government lab work includes the design and installation of water, wastewater, electrical and combustion control systems, on site of major utilities; laboratory information systems' modernization and firewall cyber log review automation. As part of a team, Brad was awarded his lab's outstanding 2014 patent, on the development of a multispectral infrared simulation target array; his portion for algorithmic development; another portion of the project he designed included the first remote controls designed for a propane-fueled jet engine simulator from NASA. Other responsibilities included assisting to identify computing technologies to assist physicists, chemists and energetics engineers research fundamental and applied scientific investigation.

Brad's service includes various leadership positions, including as past President and Program Chair, of the technologically rich Connecticut Valley Section of ISA (The International Society for Automation); a charter voting member of the now 900+ member ISA99 (Industrial Automation and Control Systems Cyber Security Standards committee), a joint ANSI/IEC standard development; representing them in a US/German Standards Panel 2018 keynote in Washington, DC. He has presented research (complex systems semantic resolution and cyber security) to, and chaired, a variety of IEEE and ISA conference sessions, including organization of the 2018 ISA99 global meeting in Washington, DC.

Dr. Brad Taylor now teaches computer languages, software engineering, knowledge management, data structures, digital design and algorithms in the Department of Electrical Engineering and Computer Science, School of Engineering, at The Catholic University of America as an Assistant Clinical Professor. Completing his Master and Doctor of Science degrees in Computer Science at The George Washington University, he taught at USNA, GWU and the University of the District of Columbia.