NATIONAL ENGINEERS WEEK

The National Society of Professional Engineers founded National Engineers Week in 1951. It's always celebrated at the time of George Washington's birthday. Our nation's first president was a military engineer and a land surveyor. The mission then, and now, is to increase public awareness and appreciation of the engineering profession.

Peninsula Engineers Council 2025 Annual Awards Banquet

with presentation of the Engineer of the Year and Doug Ensor Awards

Engineer of the Year—Rob Gies, PhD

Dr. Rob Gies is an Associate Technical Fellow at Newport News Shipbuilding (a division of Huntington Ingalls Industries) with 34 years of experience as an engineer, engineering manager and program manager. In his engineering and design experience, he developed propulsion systems solutions for two classes of Aircraft Carriers designed and built at Newport News Shipbuilding (NNS). He also managed engineering teams providing modernization and upgraded designs for CVN 76 (USS Ronald Reagan), and whole ship integration for the Navy's newest CVN class, CVN78. Recognized as a technical leader, he managed the company's Washington Engineering office and interfaced with Navy leadership in support of Aircraft Carrier and Submarine design efforts at NNS. His program management and engineering experience spans the many Navy platforms supported at NNS, including Los Angeles, Virginia, and Columbia Class submarines and Nimitz and Ford Class aircraft carriers. He also worked in ship repair at NNS. Dr Gies received his Doctor of Philosophy in Systems Engineering and Engineering Management from Old Dominion University and currently serves as an adjunct professor at ODU as well as the Engineering Professional in Residence representing NNS. He also earned his BSME and MEM from Old Dominion as well.

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Doug Ensor Award—Dr. Brett Hiller

Dr. Brett Hiller is a Research Aerospace Engineer in the Configuration Aerodynamics Branch at the NASA Langley Research Center. He received an Honors Bachelor of Science in Mechanical Engineering and a Bachelor of Science in Physics from the University of Arkansas. Additionally, he earned a Master of Science and a Doctor of Philosophy in Aerospace Engineering from the Georgia Institute of Technology. Over his six-year tenure at NASA, he has contributed significantly to the design and analysis of next-generation commercial, military, and planetary vehicles. Dr. Hiller served as the Principal Investigator for the Cruise Slotted Wing (CSW) task under the NASA Advanced Air Transport Technology Project. Hiller and his colleague, Richard Campbell, are the co-developers of a new slotted airfoil concept, the Aft-Laminar Multi-Element Airfoil (ALMA), which addresses the historic skin-friction penalty seen on CSW configurations by maintaining natural laminar flow on the flap element while still providing the robust off-design performance relative to traditional supercritical airfoils.

In addition to his NASA research, he has conducted research for the international NATO Science and Technology Organization (STO) AVT-298 task group on "Reynolds Number Scaling Effects on Swept Wing Flows" since 2019 and was officially appointed to the

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Distinguished Keynote Speaker

Dr. David Conner

Associate Professor in the School of Engineering and Computing, Christopher Newport University

David Conner began his engineering career on the Virginia Peninsula working as an Engineering Co-op student at Virginia Power's Yorktown Power Station in 1986. After funding his education through numerous work terms, he graduated with a B.S. in Mechanical Engineering from Virginia Tech in 1991 and returned to Yorktown as a field engineer. He moved to Lynchburg, Virginia and continued in the power industry building power system simulators for TRAX Corporation from 1992 to 1998. His growing interest in research led him to return to Virginia Tech for a Master of Science in Mechanical Engineering; his thesis is entitled "Sensor Fusion, Navigation, and Control of Autonomous Vehicles".

Deciding that he liked the research side of engineering, he headed north to Pittsburgh and joined the Robotics Institute at Carnegie

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FRIDAY, February 21, 2025 – Christopher Newport University,
David Student Union, Newport News, Virginia 23606
5:30 PM - Social Hour, 6:30 PM Dinner and Program

Menu: Greek salad; Blacken Salmon on a roasted corn and black bean salsa; Chicken Rosemary with a Sweet Vermouth Cream Sauce; Freshly baked rolls with butter; Roasted Potatoes; Fresh Vegetable Medley; Cheeses cake and chocolate cake

Tickets: $60 per person, $20 for students. To purchase tickets, please go online to https://cnu.irisregistration.com/Site/2025pec or contact Bill LaBelle at (757) 619-9050 or your professional society's PEC representative. Please register by Friday, February 7, 2025.

Engineer of the Year—Dr. Rob Gies

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Dr Gies has led by example with service to his community throughout his career providing leadership as an ODU alumni (President and Board of Directors for the Alumni Association, Vice Chair College of Engineering Advisory Board); Boy Scouts of America (Eagle Scout, ASM, and Advisor boards); Nansemond-Suffolk Academy (Chair, Board of Trustees); Newport News Apprentice School (Instructor); as well as many other church and civic organizational leadership positions.

Dr Gies has served the engineering profession throughout his career. He has participated in leadership of several local and national professional societies including ASME as Director, Chair and Vice Chair; SNAME as Chair, Regional Senior VP, International Planning Committee and STEM Out-Reach, and has been a member of several other societies including ASNE. Naval Submarine League, United States Navy League, International Council on Systems Engineering, American Society for Engineering Management, Industry Advisory Board, Omicron Delta Kappa, and Phi Kappa Phi. In 2022, he joined the PEC as vice chair, chair, past chair, and continues to serve as a vital member of the of the PEC. In 2023, he was the recipient of the Best Dissertation of the Year Award by ASEM, and in 2024, he was honored by ASEM as the Engineering Manager of the Year.

Dr. Gies was recognized early in his career for his engineering excellence as the Doug Ensor Award winner in 2000. With this year's recognition as EOY for 2025, this places Dr. Gies into a unique position in the history of the PEC with the distinction as the first engineer to receive both the DEA and EOY award.

Dr. Gies has been married to Louisa Gies for over thirty-one years. They have a son, Austin, who earned a Bachelor of Science and Master of Science in Mechanical Engineering in 2022, and 2024, respectfully, both from Georgia Tech.

Doug Ensor Award—Dr. Brett Hiller

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task group in 2020 because of his contributions toward the NASA National Transonic Facility (NTF) wind tunnel test. In his role as Pretest CFD Team Lead, Hiller has led an international team of researchers to generate a multi-solver computational database and develop a framework to enable rapid CFD-to-experiment comparisons. He also played a key role in the dynamic stability assessment of the Mars Sample Return (MSR) Earth Entry System, developing complex CFD simulations to analyze vehicle performance.

Dr. Hiller's contributions extend beyond research as he mentors interns and serves on multiple AIAA committees, where he has coordinated educational outreach efforts. He is the recipient of numerous awards, including NATO's Early Career Scientist Recognition and multiple accolades from AIAA for his technical and community service achievements.

Distinguished Keynote Speaker—Dr. David Conner

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Mellon's School of Computer Science. He developed paint deposition models for path planning of industrial painting robots, earning a second Master of Science degree in Robotics, and then completed his PhD in Robotics. His 2007 dissertation, entitled "Integrating Planning and Control for Constrained Dynamical Systems", is focused on developing "composable control policies" that enabled discrete planning and high-level control behaviors synthesis. His paper "Valet Parking without a Valet" co-authored with Hadas Kress-Gazit was a finalist for best paper at IROS 2007.

In 2008, David returned to Blacksburg, Virginia and joined TORC Robotics as a Research Scientist. There he worked on a variety of sensor fusion, planning, and collision prediction systems under several SBIR grants. In 2012, he led Team ViGIR – **Vi**rginia-**G**ermany **I**nterdisciplinary **R**obotics – as Principal Investigator in the DARPA Robotics Challenge (DRC). After competing in the "Virtual Challenge", the team was awarded an early prototype of the Boston Dynamics Atlas Robot and competed in the DRC Trials (2013) and Finals (2015). The team included students from the Technical University of Darmstadt (Germany), Virginia Tech, Cornell, and Oregon State. After enjoying the opportunity to work with students, he again changed careers, moving back to the peninsula in August of 2015 to work at Christopher Newport University.

Dr. Conner is currently an Associate Professor in the School of Engineering and Computing at CNU where he teaches courses in introductory Programming for Data Manipulation, Data Structures and Algorithms, Artificial Intelligence, Mechatronics, Robotics, and Parallel Processing. He has published one book chapter, ten journal articles, and 29 peer reviewed conference papers. He has supervised numerous undergraduate students and eleven master students, winning CNU's 2021 award for Graduate Student Mentoring. He and his students in ***CHRISLab*** - Capable Humanitarian Robotics and Intelligent Systems Lab - develop open-source software for the Robot Operating System (ROS) ecosystem to enable high-level behavioral control of autonomous systems.