

DANC Science & Technology Forum

04 MAY 2022

Agenda:

9:00 – 9:50 Coffee / Networking
10:00 – 10:15 Welcome – Chancellor Jose V. Sartarelli / Tammy Everett / Phil Williams
10:15 – 12:00 Presentations
12:00 – 12:30 Lunch
12:30 – 2:00 Presentations Continued
2:00 – 3:00 Networking / Technology Showcase

Dr. Stuart Borrett (10:15 – 10:40) serves as the Associate Provost for Research at the University of North Carolina Wilmington (UNCW). In this role, he is the chief research officer and leads the campus research & innovation enterprise. He also serves as the President of the UNCW Research Foundation. Dr. Borrett has been a professor in the Department of Biology and Marine Biology at UNCW since 2007. As a systems ecologist, his research is focused on discovering the processes that create, constrain, and sustain ecological systems. His expertise includes ecological modeling and network analysis, which he has used to investigate aquatic systems from the Ross Sea in Antarctica to the Cape Fear River estuary in North Carolina, to the ecological communities that form inside purple pitcher plants. https://uncw.edu/research/assoc_prov_research.html

Dr. Ulku Clark (10:40 – 11:00) is Professor of Information Systems and the Director of the Center for Cyber Defense Education at UNCW. Ulku Clark's research interests span information communications technologies; telecom policy; information security; IT productivity; healthcare IT; quality management and innovative education. She holds an MS in Information Technology and Management and a PhD in Management Science with Management Information Systems concentration from The University of Texas at Dallas. Her publications appeared in various academic journals, such as JMIS, IEEE TEM, and IMDS. <https://csbapp.uncw.edu/data/fs/vita.aspx?id=8379>

Dr. Narcisa Pricope (11:00 – 11:20) is a Professor of Geospatial Science in the Department of Earth and Ocean Sciences and Program Director of the USGIF-accredited Geospatial Intelligence Certificate at UNCW. Her research focuses on geospatial modeling, remote sensing and uncrewed aerial systems work at the food-water-energy nexus at multiple spatio-temporal scales on multiple continents. Dr. Pricope has secured funding from the National Science Foundation, NOAA Sea Grant/Office for Coastal Management, NC Department of Transportation, The Global Environment Facility, USAID, the World Bank, the US State Department Fulbright Program, and is the PM for UNCW for the National Geospatial Intelligence (NGA) BPA award for \$5,000,000 over the next 3 years to conduct GEOINT Learning through Academic Programs along with USGIF and 10 other universities across the USA. Dr. Pricope has published over 40 peer-reviewed articles on the various aspects of integrating earth observation, remote sensing and drone photogrammetry with spatio-temporal modeling to advance human security. <http://people.uncw.edu/pricopen/index.html>

Dr. Ken Halanych (11:20 – 11:40) is the leader and chief advocate for UNCW's coastal and marine sciences, Halanych is charged with oversight of the programs and facilities housed in the center, including MARBIONC, the Shellfish Research Hatchery and Finfish Mariculture Program. Dr. Halanych has earned international recognition for his research on marine invertebrate evolution and genomics. In September 2020, he participated in his 21st major scientific cruise by leading a group of 20 scientists on a 14-week voyage to investigate the biogeography and adaptation of invertebrate animals in Antarctic waters. He has helped secure approximately \$10 million in extramural funding and authored more than 200 peer-reviewed publications. <https://uncw.edu/cms/https://uncw.edu/news/2021/06/kenneth-m.-halanych-to-helm-uncws-center-for-marine-science.html>

Dr. Karl Ricanek (11:40 – 12:00) is focused on advanced research for the Intelligence Community in the areas of computer vision, artificial intelligence and machine intelligence, and biometrics. He has worked with more than 100 undergraduate and graduate students in AI affiliated research at UNCW and across the world. Dr. Ricanek is well published with more than 85 peer-reviewed articles and book chapters. He holds multiple patents; he has licensed his technology and products around the globe and has spun out three companies affiliated with AI. He developed the viral web app Face My Age in the summer of 2014 that launched many of the AI face apps that you see today. He is a member of multiple international scientific working groups and standards groups in AI, face recognition, and biometrics. <http://people.uncw.edu/ricanekk/RicanekCV.pdf>

Michael Mullins (12:30 – 12:50) is the director of the North Carolina Defense Industry Diversification Initiative (NCDIDI) and the Industry Expansion Solutions (IES) military segment regional manager, serving state-wide military clients. Michael is a former Marine and retired Army Lieutenant Colonel and spent the majority of his career at Fort Bragg. He has extensive experience executing and managing Department of Defense training contracts in Sub-Saharan Africa, Eastern Europe and Southeast Asia. During the execution of these training programs, Michael worked closely with the Department of State, various foreign ministries, non-governmental organizations, the United Nations and the Organization for Security and Cooperation in Europe. <https://www.ies.ncsu.edu/staff/michael-mullins/>

Dr. Fiona Baxter (12:30 – 12:50) is the associate executive director for NC State Industry Expansion Solutions (IES) and the assistant director of the NC Manufacturing Extension Partnership. Dr. Baxter provides leadership in several areas including the IES Evaluation Center which conducts performance evaluation, research, planning and assessments for both educational and workforce development programs. She also directs and oversees all activities associated with planning, pursuing, securing and managing external grant awards to support and enhance the organization's strategic goals. Dr. Baxter has extensive experience in developing, securing, managing and evaluating grants and in strategic planning and assessment. She holds a Ph.D. in public administration from NC State University and a M.S. in anthropology from East Carolina University. <https://www.ies.ncsu.edu/staff/fiona-baxter/>

Matt Quinn (a.k.a. “Quinn”) (12:50 – 1:10) is the CEO of Data Machines. He is a well-respected, trusted leader with 20 years of experience across the industry, academia, and government sectors. Quinn has strong leadership experience building, developing, and motivating growing teams. He has a successful record of securing substantial funding for new strategic research activities and transitioning them to warfighters and decision-makers. His expertise includes leadership of complex, sensitive programs with a focus on research and development, strategic vision, and strategic alignment within the communities he enjoys working with. Quinn has a Master of Engineering Management from Pennsylvania State University and a B.S. in Computer Science from Bloomsburg University with a minor in Mathematics. Prior to joining DMC, Quinn had a successful 17-year career at the Applied Research Laboratory at Pennsylvania State University. Over those 17 years, he initially served as an individual contributor as a software developer at different intelligence community and department of defense sites and matured to an organizational leader directing a major Division focused on DevSecOps, ML/AI, Experimentation, and Model and Simulation. <https://www.datamachines.io/team>

Dr. Martial Michel (12:50 – 1:10) is the Chief Scientific Officer for Data Machines. where he works on Computer Vision, Cloud Computing, and Data Science as well as Machine Learning Evaluation frameworks. Dr. Michel has worked in the distributed computing field for over 20 years, starting with designing data serialization algorithms for MPI (PhD subject), time synchronizing multimedia network streams collected using commercial-off-the-shelf hardware, developing a job scheduler, architecting data-driven research evaluation platforms, and conceiving and leading the team building an agnostic benchmarking model to allow researchers to bring their algorithms to specialized datasets. He has received a Bronze Medal for Superior Federal Service after developing novel evaluation frameworks supporting foundational research and advancements in media analytics. Dr. Michel is the co-chair of the OpenStack Scientific Special Interest Group, served as co-chair of the IEEE 2302-2021 and was a contributor to the NIST SP 500-332. <https://www.datamachines.io/team>

Dr. Michael Roman (1:10 – 1:30) is the Executive Director of Research and Engineering at IOMAXIS and an Adjunct Professor at Duke University’s Pratt School of Engineering. Prior to joining IOMAXIS Dr. Roman spent 7 years as a Lead Scientist at the Naval Surface Warfare Center, working on advanced concept development across a broad array of technologies spanning computational electromagnetics, meta-materials, high energy lasers, and artificial intelligence. IOMAXIS specializes in delivering cyber infrastructure and secure data transport solutions. IOMAXIS’s R&D focus is on combining advances in artificial intelligence, cryptography, and software engineering to create intelligent, autonomous cyber technologies. <https://www.linkedin.com/in/michaelproman/>

John Whiteaker (1:30 – 1:50) is the Strategic Engagement Director of North Carolina for the National Security Innovation Network (NSIN) and an Army Reservist. NSIN is a problem-solving network in the U.S. Department of Defense that adapts to the emerging needs of those who serve in the defense of our national security. As the North Carolina Director, John is focused on providing a clear and collaborative connection between North Carolina Academic Institutions, the North Carolina industry ecosystem and the DoD units tasked with the innovation of the force along with forward leaning men and women throughout the DoD. He recently separated from the Active-Duty component where he held a range of positions within the United States Army Special Operations Command focused on the INDOPACOM area of operation and transregional problem sets. John has experience in planning and conducting information operations, cyber operations, and working with inter-agency teams in support of multiple United States Country Teams. Additionally, he co-founded an ongoing program focused on working with academic partners, industry professionals and interagency partners to develop a whole of nation approach to strategic problem interventions. <https://www.nsin.mil/team/>