

## TATRC Welcomes NEW Artificial Intelligence & Machine Learning Engineer



**Dr. Amy Papadopoulos, D.Sc., AI & Machine Learning Engineer for Medical Intelligent Systems Lab.**

**D**r. Amy Papadopoulos, D.Sc. joins the TATRC team to support the MISL Lab as the AI and Machine Learning Engineer. The desire to help others has been a significant factor in many of Amy's life decisions and she believes that joining the TATRC team will allow her to continue on this path. She is excited to have the opportunity to do research at the forefront of technology in support of the Warfighter.

Before joining TATRC, Dr. Amy Papadopoulos split her time between teaching at George Washington University in the Biomedical Engineering Department, serving as Chief Technology Officer of Syndesy Technologies Inc, and managing Loudoun International Fencing Club. At GWU she was responsible for developing and then teaching Matlab and C programming courses to biomedical engineering students with an emphasis on biomedical

applications. At Syndesy technologies, a start-up making GPS trackers, she was responsible for developing the firmware for the prototype as well as a few customer-specific modifications as the company entered the market. Finally, as owner of Loudoun International Fencing Club, which she started in 2015 for her daughter (now a Varsity fencer at Duke University who won Bronze at the ACC Championships last year!) she was and still is responsible for "everything except coaching."

Born in San Diego, CA she grew up in Northern Virginia, graduating from Langley High School. She went on to study at the University of Virginia where she received her B.S. in electrical and computer engineering. After graduating from UVA, she moved to Italy and then Germany, spending three years in each country learning the language and culture while working as both a firmware developer and field application engineer. Upon returning to the United States she returned to school at the University of California, Santa Barbara to earn her M.S. in computer engineering, with a concentration in fault tolerance. After graduation she began working for Tandem Computers as a software designer and was lead on a project to implement process-pair replacement that Tandem eventually patented.

Amy left Tandem to have her two children who are her pride and joy, daughters Maria and Eleni. While pregnant with Eleni, Amy moved back to Munich, Germany with her husband where they spent 3 years before moving to Ashburn, Virginia. While back in Munich, Amy did some part time work developing GSM applications.

Upon moving to Virginia, Amy worked as a senior software developer for

Call Technologies, a company making voice mail systems. After a few years, the desire to do something that "could help people and make a difference in the world" grabbed her and she returned to school, pursuing her doctorate in biomedical engineering from George Washington University. Her doctoral dissertation was entitled, "Texture Analysis of Optical Coherence Tomography Images of the Urinary Bladder for the Recognition and Staging of Bladder Cancer," and served as her introduction into the world of research.

After defending her dissertation, Amy joined Aframe Digital, Inc. as their senior research scientist where she was the principal investigator on a number of NIH SBIR's and other grants. AFrame specialized in devices and systems for telemedicine focusing on the elderly and chronically ill. She led their research in areas such as predictive modeling, activity monitoring, gait analysis and fall detection, and was particularly interested in recognizing changes in patterns which could be indicative of an increased fall risk or declining medical condition.

Over the course of her career, Amy has been the recipient of a scholarship from the ARCS foundation, been co-developer on three patents, and has authored several papers published in peer-reviewed journals.

We here at TATRC are honored to have someone so dedicated to the field and future of technology working with our innovative team! Welcome to TATRC, Dr. Papadopoulos! ■■■