SYSTEMS ENGINEERING RESEARCH CENTER

5TH ANNUAL SERC DOCTORAL STUDENTS FORUM

NOVEMBER 7 2017
TUESDAY
12 – 5 PM

Started in 2012, the SERC Doctoral Students Forum (previously called the SERC Doctoral Fellows Program Forum) provides a unique venue for doctoral students to present their research in an open assembly of leading systems thinkers from government, industry, and academia. Doctoral students from SERC collaborating universities are invited and encouraged to present their work, even if the research was not funded through a SERC research task.

Opening Remarks	
12:15p–12:50p	Registration, Check-in, and Networking Time
12:50p–1:00p	Welcome and Introductions *Dr. Wilson Felder, Director of SERC Doctoral Fellows Program, SERC*
1:00p–1:10p	Opening Remarks from the SERC Executive Sponsor *Mr. Scott Lucero, SERC Program Manager, Office of the Deputy Assistant Secretary of Defense for Systems Engineering*
SERC Doctoral Fellow Presentations	
1:15p-1:40p	Architecture & Design of a System to Counter Improvised Explosive Devices with Automated Detection, Pattern Recognition and Human in the Loop for Decision-Making *Mr. Jorge Buenfil, ARDEC-Picatinny Arsenal SERC Doctoral Fellow*
1:40p–2:05p	A Predictive Analysis Framework For Six Degrees Of Freedom Vibration Qualification *Ms. Davinia Rizzo, Sandia National Laboratories (Doctoral Student at Stevens Institute of Technology)*
2:05p–2:30p	Model-based Tradeoffs for Affordable, Resilient Systems *Ms. Marilee J. Wheaton, Aerospace SERC Doctoral Fellow*
2:30p–3:00p	*Break*
3:00p–3:25p	Uncertainty Quantification-driven Model-Based Engineering for Defense System Design and Evaluation *Mr. Douglas Ray, ARDEC – Picatinny Arsenal SERC Doctoral Fellow*
3:25p–3:50p	Mission-Based Architecture for Swarm Composability (MASC) *Ms.Kathleen Giles (Doctoral Student, Naval Postgraduate School)*
3:50p–4:15p	Rotorcraft Tradespace Exploration Incorporating Reliability Engineering *Mr. Saikath Bhattacharya (Doctoral Student, University of Massachusetts)*
4:15p–4:40p	Towards Better Understanding of Software Quality Evolution Through Commit-Impact Analysis *Mr. Pooyan Behnamghader (Doctoral Student, University of Southern California)*
4:40p–5:05p	Improving System Performance and Tradeoffs through Design Space Exploration *Mr. Chong Tang (Doctoral Student, University of Virginia)*
SDSF Keynote Address	
5:15p–6:00p	**Research Priorities and Challenges in the National Security Ecosystem – Dr. Jason Providakes, President and CEO, MITRE Corporation**
6:00pm – 7:00pm	Reception