



S²ERC VIRTUAL SHOWCASE AGENDA

June 12, 16, & 17, 2020

Friday, June 12	
9:00-9:20	Opening Remarks & State of the Center – Shaoen Wu, S ² ERC Director, Ball State University
New Proposals	
9:20-9:40	<i>Improving the Generality and Robustness of Automated Software Vulnerability Detection with Deep Learning</i> – Shaoen Wu, Ball State University
9:40-10:00	<i>Epidemic tracing software security</i> Ulrico Celentano, University of Oulu
10:00-10:20	<i>iDetect: Intelligent System Intrusion Detection based on Event-Driven Deep Learning</i> Shaoen Wu, Ball State University
10:20-10:30	Break
10:30-10:50	<i>Automated Test Case Generation with Deep Learning</i> Shaoen Wu, Ball State University
10:50-11:10	<i>Visualizing Any Software System Using a Template-Based Converter</i> Huseyin Ergin, Ball State University
11:10-11:30	<i>SDN-Based Machine-Learning-Enabled Network Intrusion Detection</i> Xin Sun, Ball State University
11:30-11:50	<i>Detecting Satellite Landmarks from Aerial or Ground Photography</i> Noah Ziems (presenting), Shaoen Wu, Ball State University

Tuesday, June 16	
New Proposals	
8:45-9:05	<i>Converging or Diverging: Leveraging Statistical Testing with Combinatorial Test Design</i> Lan Lin, Ball State University
9:05-9:25	<i>Leveraging Rigorous Software Specification and Testing to Developing and Orchestrating Reliable Applications for Network Softwarization</i> – Xin Sun & Lan Lin, Ball State University
9:25-10:10	IAB Meeting – Discussion of New Project Funding
Status Reports	
10:10-10:20	<i>Proof of concept for the application of machine learning to educational data</i> Joni Kultanen (presenting), Pekka Abrahamsson; University of Jyväskylä
10:20-10:30	<i>Augmented Analysis: Achieving Situational Awareness in Cyber-Physical Systems with Data Enrichment</i> Lauri Haverinen (presenting), Teemu Tokola; University of Oulu
10:30-10:40	Break
10:40-10:50	<i>Quality Assurance and Health Management for Software Systems</i> Shou-Yu Lee (presenting), Eric Wong; University of Texas-Dallas
10:50-11:00	<i>Testing Internet of Things: An Enhanced Combinatorial Testing and Graph-based Technique</i> Linghuan Hu (presenting), Eric Wong; University of Texas-Dallas
11:00-12:00	<i>Status of the NSF Industry-University Cooperative Research Centers</i> Behrooz Shirazi, CISE/CNS IUCRC Program Director, National Science Foundation

Wednesday, June 17**Status Reports**

9:05-9:15	<i>Collaborative Governance Approach for Blockchain Systems (COOL)</i> Gabriella Laatikainen (presenting), Pekka Abrahamsson; University of Jyväskylä
9:15-9:25	<i>IoT SPACE</i> Marko Helenius, Tampere University
9:25-9:35	<i>ProFile: Profiling User Activity for Security with Ethical Oversight</i> Ella Peltonen (presenting), Susanna Pirttikangas, University of Oulu; Pekka Abrahamsson, University of Jyväskylä
9:35-9:45	<i>Secroam</i> Bilhanan Silverajan, Tampere University

Final Reports

9:45-9:55	<i>Proof-of-concept for Intelligent Contracts Using Blockchain</i> Taija Kolehmainen (presenting), Pekka Abrahamsson; University of Jyväskylä
9:55-10:05	<i>How Far Could Mathematics and Rigor Take Us?</i> Lan Lin, Ball State University
10:05-10:15	<i>Anomaly-based Insider Threat Detection</i> Jari Jääskelä (presenting), Lauri Haverinen, Teemu Tokola; University of Oulu
10:15-10:25	Break
10:25-10:35	<i>Building Security in: OpenAPI and IDE Integration of Fuzzing</i> Jukka Pajukangas (presenting), Pekka Pietikäinen; University of Oulu
10:35-10:45	<i>Experimental Optimization of Privacy Protection Methods</i> Ulrico Celentano, University of Oulu
10:45-11:05	Final Remarks - Shaoen Wu, S ² ERC Director, Ball State University
11:05-12:00	Final IAB Meeting