



## S<sup>2</sup>ERC SHOWCASE AGENDA

November 9, 11, & 13, 2020

Monday, November 9 (US Eastern Standard Time)	
9:00-9:20	Opening Remarks & State of the Center Lan Lin & Becky Hammons, S <sup>2</sup> ERC Co-Directors, Ball State University
New Proposals	
9:20-9:40	<i>Converging or Diverging: Leveraging Statistical Testing with Combinatorial Test Design</i> Lan Lin, Ball State University
9:40-10:00	<i>Business modeling of software ecosystems</i> Gabriella Laatikainen (presenting) & Pekka Abrahamsson, University of Jyväskylä
10:00-10:20	<i>Monitoring and Validation of the Microservice Architecture</i> Xin Sun, Ball State University
10:20-10:30	Break
10:30-10:50	<i>Combinatorial Design-based Input Space Models for Effective Function Testing</i> Eric Wong (presenting) & Linghuan Hu, University of Texas – Dallas
10:50-11:10	<i>Interpretable Detectors for Bugs and Vulnerability</i> Shaohua Wang (presenting) & Tien Nguyen, University of Texas – Dallas
11:10-11:40	IAB Meeting

Wednesday, November 11 (US Eastern Standard Time)	
New Proposals	
9:00-9:20	<i>AI/ML Adversarial Techniques, Tools and Common Knowledge (ATT&amp;CK)</i> Igor Khokhlov (presenting) & Mehdi Mirakhorli, Rochester Institute of Technology
9:20-9:40	<i>Security tool orchestration (SECTO)</i> Rauli Kaksonen, University of Oulu
9:40-10:10	IAB Meeting
Special Presentation	
10:10-10:40	<i>Services and Funding for US organizations in Finland</i> Petra Söderling, Senior Advisor, Business Finland, New Orleans, US
Status Reports	
10:40-10:55	<i>Augmented Analysis: Achieving Situational Awareness in Cyber-Physical Systems with Data Enrichment</i> Lauri Haverinen (presenting), Teemu Tokola; University of Oulu
10:55-11:10	<i>Autonomous cyber defense systems</i> Alexander Ilin, Aalto University
11:10-11:25	<i>Improving the Generality and Robustness of Automated Software Vulnerability Detection with Deep Learning</i> – Noah Ziems (presenting), Ball State University; Shaoen Wu, Illinois State University
11:25-11:40	<i>Software engineering complexity analysis and improvement</i> Tom Hill (presenting) & Lawrence Chung, University of Texas-Dallas
11:40-11:55	<i>Visualizing Any Software System Using a Template-Based Converter</i> Huseyin Ergin, Ball State University

**Friday, November 13  
(US Eastern Standard Time)**

**Status Reports**

9:05-9:20	<i>Collaborative Governance Approach for Blockchain Systems (COOL)</i> Gabriella Laatikainen (presenting), Pekka Abrahamsson; University of Jyväskylä
9:20-9:35	<i>IoT SPACE</i> Marko Helenius, Tampere University
9:35-9:50	<i>ProFile: Profiling User Activity for Security with Ethical Oversight</i> Ella Peltonen (presenting), Susanna Pirttikangas, University of Oulu Pekka Abrahamsson, University of Jyväskylä
9:50-10:05	<i>Proof of concept for the application of machine learning to educational data</i> Joni Kultanen (presenting), Pekka Abrahamsson, Antti Kariluoto, Ville Vakkuri, University of Jyväskylä
10:05-10:20	<i>Secroam</i> Bilhanan Silverajan, Tampere University
10:20-10:35	<i>Automated Test Case Generation with Deep Learning</i> Shaoen Wu, Illinois State University
<b>Final Report</b>	
10:35-10:50	<i>Testing Internet of Things &amp; Quality Assurance and Health Management for Software Systems</i> Eric Wong, University of Texas-Dallas
10:50-11:05	Final Remarks Lan Lin & Rebecca Hammons, S <sup>2</sup> ERC Co-Directors, Ball State University
11:05-12:00	Final IAB Meeting