

RESEARCH REVIEW 2021

the collaboration effect



Topics, speakers, and schedule are subject to change.

MONDAY, NOVEMBER 8

11:00 a.m.–11:10 a.m.	2021 Research Review Welcome	Dr. Paul Nielsen, Dr. Tom Longstaff
11:10 a.m.–11:55 a.m.	Keynote Presentation: Ms. Heidi Shyu	Ms. Heidi Shyu
11:55 a.m.–12:00 p.m.	Break	
12:00 p.m.–12:30 p.m.	Untangling the Knot: Automating Software Isolation	James Ivers
12:30 p.m.–1:00 p.m.	Automated Design Conformance During Continuous Integration	Dr. Robert Nord, Lena Pons
1:00 p.m.–1:10 p.m.	README: A Learned Approach to Augmenting Software Documentation	Dan DeCapria
1:10 p.m.–1:40 p.m.	Lunch Break	
1:40 p.m.–1:45 p.m.	Afternoon Introduction	Dr. Ipek Ozkaya
1:45 p.m.–2:15 p.m.	Spiral/AIML: Resource-Constrained Co-Optimization for High-Performance, Data-Intensive Computing	Dr. Scott McMillan
2:15 p.m.–2:25 p.m.	Quantum Advantage Evaluation Framework	Dr. Jason Larkin
2:25 p.m.–2:45 p.m.	Break	
2:45 p.m.–3:25 p.m.	Collaboration Conversation on Future Gamification within the DoD	Moderator: Dominic Ross Panel: Rotem Guttman, Dr. Jessica Hammer, Russell Griffin
3:25 p.m.–3:40 p.m.	Day 1 Wrap-Up	Dr. Tom Longstaff

TUESDAY, NOVEMBER 9

11:00 a.m.–11:05 a.m.	Day 2 Welcome	Dr. Tom Longstaff
11:05 a.m.–11:45 a.m.	Collaboration Conversation on Scalable Assurance of Safety-Critical Systems	Moderator: SuZ Miller Panel: Sholom Cohen, Dr. Jérôme Hugues, Dr. Sam Procter
11:45 a.m.–12:00 p.m.	Break	
12:00 p.m.–12:30 p.m.	Multicore Confidence	Dr. Björn Andersson
12:30 p.m.–1:00 p.m.	Rapid Certifiable Trust	Dr. Dionisio De Niz
1:00 p.m.–1:30 p.m.	Lunch Break	

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1:30 p.m.–2:00 p.m.	Towards Incremental and Compositionally Verifiable Security for CHIC-Centric Cyber Physical Systems	Dr. Amit Vasudevan
2:00 p.m.–2:05 p.m.	Afternoon Introduction	Chris Inacio
2:05 p.m.–2:15 p.m.	Combined Analysis for Source Code and Binary Code for Software Assurance	Dr. Will Klieber
2:15 p.m.–2:45 p.m.	Rapid Adjudication of Static Analysis Alerts During Continuous Integration	Dr. Lori Flynn
2:45 p.m.–3:00 p.m.	Break	
3:00 p.m.–3:40 p.m.	Collaboration Conversation on Digital Engineering	Moderator: Dr. Forrest Shull Panel: Dr. Tyesia Alexander, Dr. Amy Henninger, Eileen Wrubel
3:40 p.m.–4:00 p.m.	Day 2 Wrap-Up	Dr. Tom Longstaff

WEDNESDAY, NOVEMBER 10

11:00 a.m.–11:05 a.m.	Day 3 Welcome	Dr. Tom Longstaff
11:05 a.m.–11:50 a.m.	Collaboration Conversation on Human-Centered AI	Moderator: Carol Smith Panel: Dr. Jared Dunmon, Alex Van Deusen
11:50 a.m.–12:00 p.m.	Break	
12:00 p.m.–12:05 p.m.	Afternoon Introduction	Tanisha Smith
12:05 p.m.–12:30 p.m.	Train but Verify: Towards Practical AI Robustness	Dr. Nathan VanHoudnos
12:30 p.m.–1:00 p.m.	Knowing When You Don't Know	Dr. Eric Heim
1:00 p.m.–1:30 p.m.	Lunch Break	
1:30 p.m.–2:00 p.m.	Predicting Inference Degradation in Production ML Systems	Dr. Grace Lewis
2:00 p.m.–2:05 p.m.	Afternoon Introduction	Tanisha Smith
2:05 p.m.–2:45 p.m.	Collaboration Conversation on AI Fusion and AI Engineering: Enabling AI in Complex Environments	Moderator: Dr. Rachel Dzombak Panel: Dr. Yuejie Chi, Dr. Matt Gaston, Dr. Peter Steenkiste
2:45 p.m.–3:00 p.m.	Break	
3:00 p.m.–3:40 p.m.	Collaboration Conversation on the Implementation of the National Agenda for Software	Moderator: Dr. Tom Longstaff Panel: Anita Carleton, Dr. Amy Henninger, Dr. Jen Roberts
3:40 p.m.–4:00 p.m.	Event Wrap-Up	Dr. Tom Longstaff

How to Get Help

Send e-mail to research-review@sei.cmu.edu, and one of our team members will be in contact with you as soon as possible.

Online resources.sei.cmu.edu/news-events/events/research-review/program.cfm