

MONDAY,
MAY 7

PROGRAM
AGENDA

TIME	TITLE	SPEAKER	PAGE
0800 - 1630	REGISTRATION		
0900 - 1000	KEYNOTE PRESENTATION Assured Autonomy	<i>Sandeep Neema</i> (<i>DARPA</i>)	11
1000 - 1030	Data-driven Safe Control of Nonlinear Systems	<i>Susmit Jha</i> (<i>SRI International</i>)	12
1030 - 1100	BREAK		
1100 - 1130	Using Formal Methods to Reason About Neural Network Based Autonomous Systems	<i>Stephen Magill</i> (<i>Galois, Inc.</i>)	14
1130 - 1200	Towards Formally Verified Deep Neural Networks	<i>Clark Barrett</i> (<i>Stanford University</i>)	16
1200 - 1330	LUNCH (ON YOUR OWN)		
1330 - 1415	Growing Risk of Cyber Attacks	<i>Vinh Nguyen</i> (<i>ODNI</i>)	18
1415 - 1500	POSTER SESSION AND BREAK		50
1500 - 1530	Intrusion and Anomaly Detection in Autonomous Vehicle Systems	<i>Sam Lauzon</i> (<i>University of Michigan - Transportation Research Institute</i>)	19
1530 - 1600	The KeYmaera X Theorem Prover: Hybrid Systems Verification and Verified Runtime Validation	<i>Stefan Mitsch</i> (<i>Carnegie Mellon University</i>)	21
1600 - 1630	Safe Pointers and Verifiable Automatic Heap Management without Garbage Collection	<i>S. Tucker Taft</i> (<i>AdaCore</i>)	24
1630	ADJOURN FOR THE DAY		

PROGRAM AGENDA

TUESDAY, MAY 8

TIME	TITLE	SPEAKER	PAGE
0800 - 1630	REGISTRATION		
0900 - 1000	KEYNOTE PRESENTATION A Four Pillar Improvement Strategy to Qualification of Embedded Software Systems	<i>Peter H. Feiler</i> (Software Engineering Institute)	26
1000 - 1030	Perspectives on Applying the Safety Case Approach for the Assurance of Complex Heterogeneous Systems	<i>Ewen Denney</i> (SGT / NASA Ames)	27
1030 - 1100	BREAK		
1100 - 1130	Principles of Layered Attestation	<i>Paul Rowe</i> (The MITRE Corporation)	29
1130 - 1200	Architecture-Driven Assurance for Model-Based Systems Engineering	<i>Darren Cofer</i> (Rockwell Collins)	30
1200 - 1330	LUNCH (ON YOUR OWN)		
1330 - 1415	The Future of Cyber-autonomy	<i>David Brumley</i> (ForAllSecure/CMU)	32
1415 - 1500	POSTER SESSION AND BREAK		50
1500 - 1530	Model-based System Certification – A Vision	<i>Jérôme Hugues</i> (ISAE Supaero)	33
1530 - 1600	VeriCores: Cyber-Instrumenting Devices Built from Verified Components	<i>David S. Hardin</i> (Rockwell Collins)	35
1600 - 1630	High-Assurance Blockchains: Applications and Verification	<i>Joe Hendrix</i> (Galois, Inc)	39
1630	ADJOURN FOR THE DAY		
1830	CONFERENCE DINNER Chart House		60

WEDNESDAY,
MAY 9

PROGRAM
AGENDA

TIME	TITLE	SPEAKER	PAGE
300 Second Street Annapolis, Maryland 21403			
0800 - 1300	REGISTRATION		
0900 - 1000	KEYNOTE PRESENTATION Challenges Ahead for Blockchains	<i>Emin Gün Sirer</i> (Cornell University)	41
1000 - 1030	On the Emerging Trend of Computer-Aided Cryptology and the Technology Transition Gap it Presents	<i>Evan Austin</i> (SPAWAR Systems Center Atlantic)	42
1030 - 1100	BREAK		
1100 - 1145	Applying Symbolic Execution to Blockchain Applications	<i>Mark Mossberg</i> (Trail of Bits)	44
1145 - 1215	Resilient and Trustworthy Transactive Platform for Smart and Connected Communities	<i>Áron Lászka</i> (University of Houston)	45
1215 - 1245	Case Study: Verifying Safety of a UUV Heading PID Controller	<i>Daniel Genin</i> (Johns Hopkins University Applied Physics Laboratory)	48
1245	CONFERENCE ADJOURNED		