

## TCCOE Summit Technical Program

**May 9-10, 2024**

**Theme: Current Technology Advances and Modern Software Development**

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<b>Thursday May 9, 2024</b>	<b>Chair &amp; Time</b>
	<b>Dr. Jason Li</b>
<b>Day One Keynote</b> Dr. Sergey Bratus, Dartmouth University	08:45AM – 09:45AM
Break (15 minutes)	09:45AM – 10:00AM
	<b>Patrick Hurley</b>
TrustZone-Based Attestation Framework for Untrusted Operating Environments, Tom Barnett (DEVCOM/AvMC)/Zachary Clark (DornerWorks)	10:00AM – 10:30AM
Computers don't go to high school, or: Safety and Security Risks Induced by Computer Arithmetic, Thomas Wahl, GrammaTech	10:30AM – 11:00AM
seL4 Ecosystem update, Gernot Heiser & June Andronick, seL4 Foundation	11:00AM – 11:30AM
A Policy-free Kernel for Scalable Multi-core, Bounded Execution, and Verification, Gabriel Parmer, George Washington University	11:30AM – 12:00PM
<b>Lunch (on your own)</b>	12:00PM – 13:30PM
	<b>Dr. Nathan Daughety</b>
The Benefits of Performing Comprehensive Memory Safety Validation, Trent Jaeger, UC Riverside	13:30PM – 14:00PM
Leveraging Rust in seL4 user space, Nick Spinale, Colias Group, LLC	14:00PM – 14:30PM
Building Security and Resilience on ARM Morello Systems, Eric Hwang, Trusted Science and Technology	14:30PM – 15:00PM
Building Dependable Embedded Systems with Open-Source Components, Kate Stewart, VP Dependable Embedded Systems, The Linux Foundation	15:00PM – 15:30PM
Break (30 Minutes)	15:30PM – 16:00PM
<b>Panel Discussion – Technology Advances and Modern Software Development (Moderator: Ray Richards)</b>	16:00PM – 17:00PM
<ul style="list-style-type: none"> <li>• Dr. Sergey Bratus, Dartmouth University</li> <li>• Dr. Trent Jaeger, UC Riverside</li> <li>• Ms. Kate Stewart, The Linux Foundation</li> <li>• Dr. Ryan Craven, ONR</li> </ul>	
<b>Adjourn for the day</b>	17:00PM

<b>Friday, May 10, 2024</b>	<b>Chair &amp; Time</b>
	<b>Dr. Jason Li</b>
<b>Day Two Keynote</b> Dr. Ryan Craven, ONR	08:45AM – 09:45AM
Break (15 minutes)	09:45AM – 10:00AM
	<b>Todd Carpenter</b>
Expanding AADL Code Generation and Formal Methods Tooling to SysMLv2, Dr. John Hatcliff, Kansas State University	10:00AM – 10:30AM
Enabling Lightweight Secure Containers, Hui Lu, University of Texas at Arlington	10:30AM – 11:00AM
High Assurance Containerization for Multi-Level Security in the Cloud, Dr. Nathan Daughety, AFRL/RIGA	11:00AM – 11:30AM
Learning Environments for Developing Autonomous Cyber Agents, Dr. Daniel Balasubramanian, Vanderbilt University	11:30AM – 12:00PM
Updates from TCCOE, Patrick Hurley, TCCOE	12:00PM – 12:15PM
Closing Remarks (Brad Martin, DARPA; Dr. Nathan Daughety, Air Force Research Laboratory)	12:15PM - 12:30PM