

## TCCOE Summit Technical Program May 9-10, 2024

## Theme: Current Technology Advances and Modern Software Development

| Thursday May 9, 2024   | Chair & Time        |
|--|---------------------|
|  | Dr. Jason Li        |
| Day One Keynote  | 08:45AM – 09:45AM   |
| Dr. Sergey Bratus, Dartmouth University  |                     |
|  |                     |
| Break (15 minutes)   | 09:45AM – 10:00AM   |
|  | Patrick Hurley      |
| Secure Boot Hardware-Software Attestation of Networked Systems, 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,                                       | 11:30AM – 12:00PM   |
| Gabriel Parmer, George Washington University   |                     |
|  |                     |
| Lunch (on your own)  | 12:00PM – 13:30AM   |
|  | Dr. Paul Ratazzi    |
| 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   | 14:30PM – 15:00PM   |
| Science and Technology   |                     |
| Building Dependable Embedded Systems with Open-Source Components, Kate   | 15:00PM – 15:30PM   |
| Stewart, VP Dependable Embedded Systems, The Linux Foundation  |                     |
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| Break (30 Minutes)   | 15:30PM – 16:00PM   |
| Panel Discussion – Technology Advances and Modern Software Development (Moderator: Ray Richards)                         | 16:00PM – 17:00PM   |
| Dr. Sergey Bratus, Dartmouth University  |                     |
| Dr. Trent Jaeger, UC Riverside   |                     |
| Ms. Kate Stewart, The Linux Foundation   |                     |
| Dr. Ryan Craven, ONR   |                     |
|  |                     |
| Adjourn for the day  | 17:00PM             |

| Friday, May 10, 2024 | Chair & Time |
|----------------------|--------------|
|                      | Dr. Jason Li |



| Day Two Keynote   | 08:45AM – 09:45AM |
|---|-------------------|
| Dr. Ryan Craven, ONR  |                   |
|   |                   |
| Break (15 minutes)  | 09:45AM – 10:00AM |
|   |                   |
|   | Todd Carpenter    |
| Expanding AADL Code Generation and Formal Methods Tooling to SysMLv2, Dr.         | 10:00AM – 10:30AM |
| John Hatcliff, Kansas State University  |                   |
| 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 | 11:00AM – 11:30AM |
| Daughety, AFRL/RIGA   |                   |
| Learning Environments for Developing Autonomous Cyber Agents, Dr. Daniel          | 11:30AM – 12:00PM |
| Balasubramanian, Vanderbilt University  |                   |
| Updates from TCCOE, Patrick Hurley, TCCOE   | 12:00PM – 12:15PM |
|   |                   |
| Closing Remarks (Brad Martin, DARPA; Dr. Paul Ratazzi, Air Force Research         | 12:15PM - 12:30PM |
| Laboratory)   |                   |