

Safety Critical Software Design Seminar

About the Event

This seminar is focused on state of the art safety and mission critical software and systems. Discussion topics will cover the latest avionics trends and new technologies, including:

- Processor usage trends in the MIL/Aero market
- Safety critical software design methodologies with multicore processors,
- Reducing the cost of change for certifiable systems,
- Minimizing Worse Case Execution (WCE) time and jitter in real-time partitioned environments.

After the presentations, DDC-I and Rapita will demonstrate tooling for their respective products.

Organizers



KONAKA Defense provides solutions and components in the areas of real time test, hardware in the loop and avionics simulation. Their services are including embedded safety critical software testing and validation according to DO-178C.



DDC-I offers complete solutions for embedded software developers including field proven safety critical real-time embedded operating systems, multi-language compilers, integrated development environments, run-time systems, custom software development services, and legacy software system modernization solutions, with a primary focus on safety-critical applications. For over 20 years, DDC-I has worked closely with an impressive who's who list of aerospace and defense contractors, providing innovative products and reliable engineering expertise.



Rapita Systems provides on-target software verification tools and services globally to the embedded aerospace and automotive electronics industries. Our solutions help to increase software quality, deliver evidence to meet safety and certification objectives and reduce project costs.

Location and Date

14 February 2019 – Crowne Plaza Hotel, Ankara

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Agenda

Registration and Networking (08:30 – 09:00)

Overview of the Avionics Market (09:00 – 09:30)

- System types - Yesterday, today, future
- Evolution (how did we get here?)
- Where the avionics market is headed
 - Processor technologies
 - New application areas
 - Security

Overview of DeOS (09:30 – 12:30)

- Avionics Pedigree
- Certified software reuse
 - Why is it important
 - Methods, trade-offs, and snags - RSC, etc., data coupling, how does reuse play out (e.g., cobble together modules that were changed/new and old...and still do a system test).
 - How is it done with Deos
- Data Distribution Service – Data decoupling and value in reuse
- Multicore and FAA CAST-32A
 - What are the primary concerns with multicore
 - Resolving multicore contentions with Deos – for a DO-178 DAL-A system
- Security building blocks
 - Secure boot
 - Secure communications
 - Obfuscation
- Development tooling for certified system development
 - Running development tooling without impacting application operation
 - Determining target specific Worst Case Execution times
 - Critical qualified tools

Lunch Break (12:30 – 13:30)

Development Tool Demonstrations (13:30 – 14:30)

Rapita Verification Suite (14:45 – 16:45)

- On-target verification of critical embedded software systems
- Rapita's multicore timing analysis approach
- RapiTime – DeOS Integration / Demo

Contact and Registration

Please contact info@konaka.com.tr for more information and registration.