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| |  | | --- | |  | | |  | | --- | |  |  |  |  | | --- | --- | | [Cyber Security and Information Systems Information Analysis Center](http://click.thecsiac.com/track/click.php?u=30024433&id=47ca6e18e24a4fa0993996b5ca8f320c&url=http%3A%2F%2FtheCSIAC.com&url_id=3df6fa9231b5b4fddc7adbfaa302377532f2b0ea) | Department of Defense Defense Technical Information Center |  |  | | --- | |  |  |  |  |  |  | | --- | --- | --- | --- | | |  | | --- | |  | | | | | |  |  |  | | --- | --- | --- | |  | [An Architecture-centric Virtual Integration Strategy to Safety-critical System Verification](http://click.thecsiac.com/track/click.php?u=30024433&id=47ca6e18e24a4fa0993996b5ca8f320c&url=http%3A%2F%2Fr.thecsiac.com%2F4834cl%3Fid%3D65276&url_id=2b14de907750b0bafe5f7e8a3544743e9259ba86) | | |  | | | |  | The CSIAC invites you to attend a Webinar using WebEx. This event requires registration.  **Title:** An Architecture-centric Virtual Integration Strategy to Safety-critical System Verification  **Host:** Cyber Security and Information Systems Information Analysis Center - CSIAC  **Presenter:** Peter Feiler  **Date and Time:** Wednesday, February 12th, 2014 12-1pm EST  **Registration:** *(limited to 200 registrations)*[click here](http://click.thecsiac.com/track/click.php?u=30024433&id=47ca6e18e24a4fa0993996b5ca8f320c&url=http%3A%2F%2Fr.thecsiac.com%2Fvkjq2d%3Fid%3D65276&url_id=8084e8991c1cc68e60935760a00350d8646a1a41) Registration Required.  As safety-critical systems have become more software-reliant, verification of such system has become an increasing challenge, as evidenced exponential increase in verification related software rework cost. Industry studies show that 70% of defects are introduced in requirements and architecture design, while 80% are discovered post-unit test, with up to 80% of system functionality dealing with exceptional conditions to meet safety, availability, and reliability requirements.   We present an architecture-centric strategy to address this challenge. The first part of this strategy involves requirement specification and decomposition in the context of evolving an architecture design to bridge the gap between system requirements and software requirements in current practice. The second part is the integration of safety and reliability analysis early into the requirement and architecture design process. The third part is to leverage virtual integration and analysis of architecture models with respect to functional and operational quality requirements to perform incremental compositional verification. The final part is to maintain verification results throughout the development process that combined with test results provides assurance evidence for system certification.  **Presenter Biography:**  Peter Feiler is a 28 year veteran and currently a senior member of the Architecture Practice (AP) initiative of the Software Engineering Institute (SEI). His current research interest is in improving the quality of safety-critical software-intensive systems, aka. cyber-physical systems, through architecture-centric virtual integration and analysis to reduce rework and qualification costs. Peter Feiler has been the technical lead and main author of the SAE Architecture Analysis & Design Language (AADL) standard. He has a Ph.D. in Computer Science from Carnegie Mellon.  ----------------------------------------------------------- To register for the online event: -----------------------------------------------------------   1. Visit the following url: [http://r.thecsiac.com/vkjq2d](http://click.thecsiac.com/track/click.php?u=30024433&id=47ca6e18e24a4fa0993996b5ca8f320c&url=http%3A%2F%2Fr.thecsiac.com%2Fvkjq2d%3Fid%3D65276&url_id=8084e8991c1cc68e60935760a00350d8646a1a41) 2. On the registration form, enter your information and then click "Submit"   Once your registration is approved, you will receive a confirmation email message with instructions on how to join the event.  ----------------------------------------------------------- For assistance: ----------------------------------------------------------- You can contact Thomas McGibbon at [tmcgibbon@quanterion.com](mailto:tmcgibbon@quanterion.com) |  | | |  | | --- | |  | |  | | --- This is an automatic message from the Cyber Security and Information Systems Information Analysis Center. To unsubscribe from this email list or other CSIAC email lists, [update your subscriptions settings](http://click.thecsiac.com/track/click.php?u=30024433&id=47ca6e18e24a4fa0993996b5ca8f320c&url=https%3A%2F%2Fwww.thecsiac.com%2Fsubscription_manager%2F%3Fid%3D65276%26e%3Dnjones%40coastline.edu&url_id=e2d71aaf8e85abedb4ce5a427d68f13387b8b641).   |  | | --- | |  | | |  | | |  | | --- | |  | |
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