

NASA's 2014 International IV&V Workshop Agenda

Dates: September 9-11, 2014

Location: 5000 NASA Blvd, Fairmont, WV

For more information: <http://www.nasa.gov/centers/ivv/workshops/index.html>

All times are Eastern Daylight Time (EDT)

| Day 1 (September 9, 2014) | | |
|---------------------------|---|----------------------------|
| Time | Title | Speaker(s) |
| 8:00 | Opening Remarks | |
| 8:15 | The Art & Science of Managing Command File Errors | Leila Meshkat |
| 8:45 | Analysis of the Effects of Auto Generated Code on Independent Verification & Validation (IV&V) of Mission Critical Software | Noble Nkwocha |
| 9:15 | Introduction to DMA & AMF | Steve Husty, Don Kranz |
| 9:45 | BREAK | |
| 9:55 | Plug and Play with DMA Components | Gary Marchiny, Tom Gullion |
| 10:25 | Using Combinatorial Methods to Determine Test Set Size | Richard Kuhn |
| 10:55 | IRSim: A Web-based Tool for Establishing Traceability Links among Software Artifacts | Dharma Ganesan |
| 11:25 | LUNCH | |
| 12:55 | Safety and Assurance Cases for Complex System Products [Panel Session] | Sam Brown |
| 1:55 | Application of GSN in the IV&V activities | Umeda Hiroki |
| 2:25 | Comparison of IV&V's Use of Non Verification Environments and Program Use of Verification Environments | Ricky Beamer |
| 2:55 | BREAK | |
| 3:05 | RBA Challenges (IA) | Joelle Loretta |
| 3:35 | IV&V Lessons Learned From a Memory-Scrub Anomaly | Koorosh Mirfakhraie |
| 4:05 | There and Back Again – Connecting Assurance Statements to Analysis Spreadsheets in Support of Evidence Based Assurance for the GSDO Project | Patrick Olguin |
| 4:35 | Global Precipitation Measurement (GPM) Safety Inhibit Timeline Tool | Shirley Dion |
| 5:05 | Optional Special Topic | |
| 5:35 | END OF DAY 1 | |

| Day 2 (September 10, 2014) | | |
|-----------------------------------|--|------------------------------|
| Time | Title | Speaker(s) |
| 8:00 | Automating Evidence Collection for Software Assurance from Existing Status Reports | Bob Inscoe |
| 8:30 | Use of XSLT to transform the output of multiple Static Code Analysis tools into a consistent analysis spreadsheet format | Ben Markle |
| 9:00 | Automated Visual GUI Testing for the Space Network | Charles Song |
| 9:30 | Cost-Effectiveness of IV&V by Life-Cycle Phase | Ken Haught |
| 10:00 | BREAK | |
| 10:10 | What IV&V Can Learn from River Guides | Lorelei Lohrli-Kirk |
| 10:40 | NASA Software Assurance Challenges for Commercial Crew Program | Chad Schaeffer |
| 11:25 | LUNCH | |
| 12:55 | IVV of Model Based Systems | Don Kranz, Marcus Fisher |
| 1:40 | Static Code Analysis for Information Assurance: Current Practice and Future Directions [Panel Session] | Katerina Goseva-Popstojanova |
| 2:40 | BREAK | |
| 2:50 | Metrics for V&V of Cyberdefenses | Martin Feather |
| 3:50 | IV&V and the Heartbleed Vulnerability | Rick Hess |
| 4:20 | Get Confidence in Mission Security with IV&V IA | Rich Brockway |
| 5:05 | Optional Special Topic | |
| 5:35 | END OF DAY 2 | |

| Day 3 (September 11, 2014) | | |
|-----------------------------------|--|-------------------|
| Time | Title | Speaker(s) |
| 8:00 | Capturing Autonomy Features for Unmanned Spacecraft with ARE, the Autonomy Requirements Engineering Approach | Emil Vassev |
| 8:45 | The Challenges of Assuring Vision Systems for Space Missions | Charley Price |
| 9:45 | BREAK | |
| 9:55 | Robotic Systems for Asteroid Redirect and Satellite Servicing Missions Q&A [Panel Session] | Charley Price |
| 10:55 | Sketch Theory as a Framework for Knowledge Management | Ralph Wojtowicz |
| 11:25 | LUNCH | |
| 12:55 | Utilizing Software Metrics Analysis to Provide Additional IVV Rigor and Assurance | Chris Lescinsky |
| 1:25 | End-to-End Fault Management Analysis Method, Results, and Future Improvements | Ryan Starn |
| 1:55 | NASA IV&V Software Emulator Technology Portfolio | Scott Zemerick |
| 2:40 | BREAK | |
| 2:50 | Space Hardware | Steve Yokum |
| 3:35 | Assessment of Fault Management in network resource intensive and protocol rich environments | Tom Hempler |
| 4:05 | Scoping and Analysis of FPGAs from an IV&V Perspective | Pradip Maitra |
| 4:35 | Optional Special Topic | |
| 5:05 | Closing Remarks | |
| 5:20 | END OF DAY 3 | |