The NASA IV&V Annual Workshop offers an in-depth understanding of the challenges that V&V organizations face in assuring that system software operates safely and reliably. The goal of the workshop is to generate solutions to these challenges.

**TOPICS**
- Feasibility studies
- Interface agents
- IV&V of early lifecycle artifacts
- Mobile agents
- Reliability Engineering
- Mobile Systems
- Autonomic computing
- Service oriented requirements engineering
- Adaptive Systems
- Requirements Engineering
- Enterprise Software, Middleware, and Tools
- Software dependability
- Service-centric software engineering
- Software Quality
- Embedded and Ubiquitous Software Engineering
- Requirements quality
- Knowledge Acquisition
- Human-Computer Interaction
- Agent architectures, ontologies, languages and protocols
- Pervasive Computing
- Multi-agent systems
- Swarm intelligence
- Integrity, Security, and Fault Tolerance
- Commercial Space
- Service oriented architectures
- Software Safety
- Partitioned systems
- Software Security
- Fault Tolerance
- Robotic systems
- Assurance
- Off-nominal operations
- DOD
- Documenting critical systems
- FAA
- Anomaly work-around
- Security
- System recovery
- Power Generation and Distribution
- Static and dynamic testing
- Software based hazard causes, contributors, and controls
- Cost effective software based test environments
- Security threats and risks
- Certified Test Environments
- Reactive Systems
- Software Test Programs
- Complex algorithms
- Test Oracles
- Disaster Recovery planning
- Verifying scripts
- Operational readiness
- Software Reuse
- Generated Software
- Knowledge Representation and Retrieval
- Static Analysis
- Knowledge Engineering Tools and Techniques
- Knowledge Visualization
- Software Interfaces
- Data visualization
- Data integrity
- Learning Software Organization
- Software Assurance
- NASA systems engineering processes
- Software Domain Modeling and Meta-Modeling
- Computing the value of IV&V
- IV&V as an explicit risk reduction strategy
- Management and Planning of Independent Verification and Validation
- Architecture frameworks as applied to NASA systems
- Issue and Risk Tracking
- Applying social media to IV&V
- Criticality Analysis
- Software Engineering Decision Support
- Design completeness, correctness
- Software Process Modeling
- Designing for Performance
- Application of Data Mining tools to support IV&V
- Modeling and simulation
- Workshops for IV&V
- WORKSHOP SITE
- New technologies for IV&V
- The IV&V Annual Workshop will be held at the WVU Erickson Alumni Center in Morgantown, West Virginia, USA. http://alumni.wvu.edu/eac
- Agent-based software engineering
- Artificial Intelligence Approaches to Software Engineering
- Component-based Software Engineering
- INFORMATION FOR AUTHORS
- Abstracts must be written in English. An electronic (PDF or MS Word format) should be submitted via email to Sadie.E.Downes@nasa.gov.
- Automated Software Specification
- Computer-Supported Cooperative Work
- Automated Software Design and Synthesis
- IMPORTANT DATES
- Measurement and Empirical Software Engineering
- April 15, 2012
- Abstract submission due (Updated March 6, 2012)
- Programming Languages and Software Engineering
- May 2, 2012
- Notification of Acceptance
- Patterns and Frameworks
- June 1, 2012
- Attendee Registration opens
- Reflection and Metadata Approaches
- July 1, 2012
- Sponsorship registration deadline
- Program Understanding
- August 31, 2012
- Attendee Registration closes
- Transitioning NASA experience to non-space domains
- The future of software development and its impact on IV&V
- Software product lines
- Annual IV&V Workshop Lisa Downs, sadie.e.downs@nasa.gov
- Improving effectiveness and efficiency of IV&V methods
- Registration: Ashley D'Annunzi, ashley.d.dannunzi@ivv.nasa.gov
- Team-based approach to performing IV&V of systems
- Corporate Sponsorships: Bree Deren-Layton, bree.a.layton@ivv.nasa.gov
- IV&V Challenges and Opportunities of SLDC Choices
- NASA IV&V Facility, 100 University Drive, Fairmont WV 26554