

# 2012 ITEA Journal Themes



The ITEA Publications Committee has established themes for the 2012 issues of *The ITEA Journal* and invites articles in the following areas:

**T&E at the Speed of Need (March issue).** The speed of need is the time between definition of a user need and initial operation of the capability. The demands of war have shortened the timeline on requirements for military systems. Rapid acquisition and rapid fielding initiatives arising from urgent operational needs have created an entire industry in the defense community. Commensurately hastened is the pace at which transportation security and border protection measures need to be deployed. We see information technology (IT), especially software, change with a frequency of months not years. Test and evaluation (T&E) must be responsive to the acquisition timelines. The Federal Aviation Administration, Border Patrol, law enforcement and many other organizations have adapted to the changing speed of need. This issue takes a candid look at agile software development processes, cyberspace T&E, defense IT acquisition reform, rapid acquisition and fielding, reconfigurable test capability, testing on demand, reuse and other ideas for streamlining the T&E process in support of accelerating deployment of new products, services and capabilities. (*Manuscript deadline: December 1, 2011*)

**Drowning in Data, Thirsty for Information (June issue).** Digital technology and Moore's law provide us with the ability to acquire, create, and store data at unprecedented rates and volumes. Literature searches that would have taken days or weeks in the age of library card catalogs can be accomplished in seconds over the internet. Data, or more generally information, has become big business in addition to being the business of T&E. Yet technological solutions also come with their own problems and the morass of data has not led to a commensurate growth of knowledge or ability to exploit the data. This issue examines the plethora of data, which is growing exponentially, and the ever critical demand to extract meaning and value. Articles are invited on such topics as data acquisition, storage, archiving, access, validation, exploitation, and visualization; data as a service; cloud computing; service oriented architecture; metadata syntax and semantics; instrumentation; accelerating the process from acquiring data to implementing a decision; data and sensor fusion; data preservation; distributed and non-relational databases, and related topics. (*Manuscript deadline March 1, 2012*)

**Strategic Partnering: We are Doing More Without More (September issue).** Shrinking budgets and accelerating technology development put ever-increasing pressure on product development and T&E organizations: shorter schedules, fewer personnel, less access to facilities. Extreme environments and complex systems add additional demands. To provide the requisite test capabilities, the T&E community must be agile and responsive as well as innovative. The automobile and aircraft industries have long spread liability and gained benefit from seeking standard parts production from independent manufacturers or specific systems development parceled to risk sharing partners. Strategic partnering takes such forms as outsourcing, reuse, and collaboration; common test and training infrastructure; integrating developmental and operational testing; shared facilities among government, industry, and academia. Cooperation comes with its own issues: some loss of control, policy or statutory impediments, protection of proprietary rights, and conflicting goals of leadership. This issue addresses all forms of partnering, allowing testers to do more without having more resources to accomplish their task. (*Manuscript deadline: June 1, 2012*)

**Cultivating the T&E Workforce (December issue).** Test and evaluation are professions not academic disciplines and as such we can't merely recruit more as needed. We recruit engineers, physicists, computer scientists, mathematicians, chemists and other degreed professionals and train them in test and evaluation. As technology changes and systems and instrumentation become more complex, T&E professionals need to continue formal education as well as improve T&E expertise. In addition, we need to consistently attract young people to the disciplines of science, technology, engineering, and mathematics. Cultivating the T&E workforce requires asking the question: what should the T&E professional's background consist of today? The internet gives us nearly immediate access to the four W's – who, what when and where – but can't provide why and how, which require human reasoning. Appealing to younger professionals means communicating with them in their preferred mode, such as social networking media, and recognizing that T&E will evolve as IT drives us in new directions and as younger leaders assume their roles in legacy organizations. We need to prepare the future workforce for T&E, and prepare T&E for them. This issue solicits ideas on improving the current workforce and growing the next generation: the use and benefit of certification, such as T&E, modeling and simulation, project management; Science-Technology-Engineering-Mathematics (STEM) initiatives; educating leadership; the role of the service academies in DoD; internships; and many more topics. (*Manuscript deadline: September 1, 2012*)

---

Articles and Submission: T&E articles of general interest to ITEA members and *ITEA Journal* readers are always welcome. Each issue includes specialty features, each 2-3 pages long: “**Featured Capability**” describes unique, innovative capabilities and demonstrates how they support T&E; “**Historical Perspectives**” recall how T&E was performed in the past or a significant test or achievement, often based on personal participation in the “old days” of T&E; “**Tech Notes**” discusses innovative technology that has potential payoff in T&E applications or could have an impact on how T&E is conducted in the future. **Interested authors:** Submit contributions to the ITEA Publications Committee Chairman ([itea@itea.org](mailto:itea@itea.org), attention: Dr. J. Michael Barton). Detailed manuscript guidelines can be found at [www.itea.org](http://www.itea.org) under the ITEA Publications tab.