The IEEE Computer Society offers a lineup of 13 peer-reviewed technical magazines that cover cutting-edge topics in computing including scientific applications, design and test, security, Internet computing, machine intelligence, digital graphics, and computer history. Select articles from recent issues of IEEE Computer Society magazines are highlighted below.

**Software**

In January 2009, *Software*’s editorial and advisory boards selected Michael Cusumano, Alan MacCormack, Chris Kemerer, and Bill Crandall’s 2003 article “Software Development Worldwide: The State of the Practice” as one of the magazine’s all-time best peer-reviewed articles. Authors of an update in the September/October issue, titled “Critical Decisions in Software Development: Updating the State of the Practice,” compress years of research and experience into four contemporary questions central to success in the software development business.

**IT Professional**

Energy use by PCs is a growing cost to enterprises, with most machines remaining fully powered on, even while idle, for most of the time. In “Greener PCs for the Enterprise,” Bruce Nordman and Ken Christensen present the Network Connectivity Proxy, which maintains network presence for PCs but lets them sleep while idle, thus saving energy and reducing total cost of ownership.

**Security & Privacy**

Massively distributed online role-playing games are a bellwether for problems to come in software security. As cloud computing, service-oriented architecture, and Web 2.0 take off, developers can expect to grapple with technical issues very similar to those currently facing online games.

Gary McGraw of Cigital and Ming Chow of Tufts University, guest editors of this *S&P* special issue on securing online games, tackle the problem from three angles, describing articles that address money and virtual economies, the nascent state of the law, and thorny technical issues.

A major challenge of making the recent Disney/Pixar feature film *WALL-E* was creating believable physics for human and robot crowds. To do this, Pixar technical directors combined a custom spring-physics system in the Massive software platform with traditional simulation methods. The performance was fast enough to scale for large crowds and maintain interactivity for previews.

"Brain Springs: Fast Physics for Large Crowds in *WALL-E*," an article in the latest issue of *CG&A* by Paul Kanyuk of Pixar Animation Studios, details the methods used in achieving this new level of realism in film. Visit Computing Now to view related video segments.

**Intelligent Systems**

Writer and futurist Isaac Asimov’s three laws of robotics have been inculcated so successfully into our culture that they now shape society’s expectations as to how robots should act around humans. “Beyond Asimov: The Three Laws of Responsible Robotics,” in the most recent issue of *IS*, reviews some of the shortcomings of Asimov’s laws and proposes an alternative, parallel set—three laws of responsible robotics. Authors Robin Murphy and David Woods aim to stimulate debate about accountability when robots’ actions can result in harm to people or human interests.

The July/August special issue of *D&T* features eight articles devoted to exploring high-level synthesis. Articles include overviews on state-of-the-art tools and techniques,
Semantic Web technologies have been around for some time. However, such technologies have had little impact on the development of real-world Web applications to date. This situation has changed dramatically in the past few months with the ascendancy of linked data. An article from IC’s Spotlight department, “Exploiting Linked Data to Build Web Applications” by Michael Hausenblas, shows how linked data sets can be exploited to build rich Web applications with little effort.

At the highest levels, embedded multicore can be defined as a technology, a methodology, and a business and research opportunity. Building a multicore-enabled embedded system requires developers to leverage a combination of these factors. Embedded multicore technology also includes systems on chip (SoCs) with an almost unlimited combination of homogeneous and heterogeneous processors designed to tackle specific applications.

The latest issue of Micro offers a look at successful development strategies and the state of the art in multicore processing from various perspectives.

In Memoriam: John Musa

John Musa (1933–2009) contributed broadly to the field of software engineering, especially in the area of software reliability engineering (SRE). He first shared some of his key ideas with IEEE Software’s readers in “Operational Profiles in Software–Reliability Engineering,” March/April, 1993, which was recently selected in a 25-year retrospective as a milestone in the field.

As part of a research project intended to document the development of software reliability methods, James Cusick interviewed John on his life and career. Friends and colleagues of John felt that these previously unpublished comments would provide a fitting tribute to celebrate his life and work, as his voice speaks clearly in these responses.

For the full interview, visit computingnow.computer.org.