CALLS FOR ARTICLES FOR COMPUTER

Computer seeks submissions for a June 2013 special issue on big data, exploring aspects of discovery, productivity, and policy, with a focus on their socioethical implications.

This special issue will address how deeply personal data, such as how often and with whom we communicate using our cell phones or other digital devices; our location; what products and services we buy; where we eat, sleep, and work every day; and our photos and videos will likely be scrutinized in the context of data-driven decision making. In a way, we will be trading our privacy for a new kind of “surveillance” based on the premise of customer care.

The guest editors seek varied perspectives regarding the challenges, possibilities, and benefits of big data. They particularly welcome articles that feature qualitative assessments, case studies from government agencies, perspectives from Internet search companies and other hardware and software vendors, predictive studies demonstrating paradigm shifts, and social impact research.

Articles should appeal to a broad interdisciplinary audience or policy professionals in the information and communications technology sector. The writing should be original, avoiding long discussions about theories, theorems, algorithms, or mathematical notations. All manuscripts are subject to peer review on both technical merit and relevance to Computer’s readership. Accepted papers will be professionally edited for content and style.

The guest editors for this special issue are Katina Michael (katina@uow.edu.au), an associate professor on the Faculty of Informatics at the University of Wollongong, Australia, and Keith Miller (miller.keith@uis.edu), a professor in the Department of Computer Science at the University of Illinois Springfield.

Paper submissions are due by 15 January 2013. Please email the guest editors a brief description of the article you plan to submit by 15 December 2012. Visit www.computer.org/computer/cfp6 to view the complete call for papers.

For author guidelines and information on how to submit a manuscript, visit www.computer.org/portal/web/peerreviewmagazines/computer.

Computer seeks submissions for an October 2013 special issue on multicore memory coherence.

As we enter an era of large multicore systems, the question of efficiently supporting a shared memory model has become more important. Massively parallel architectures lacking coherent shared memory have enjoyed great success in niche applications such as 3D rendering, but general programming developers still demand the convenience of a shared memory abstraction.

Efficiently using the Message Passing Interface requires that individual computation tasks must be relatively large to overcome communication latencies. It becomes difficult to use the MPI at the fine-grained level when fast on-chip communication is available. Higher-level mechanisms like MapReduce or shard-based databases are popular in particular application domains, though researchers have not yet efficiently applied them at the chip/node level.

This special issue will focus on approaches to providing scalable, shared on-chip memory, paramount in a future where individual nodes will have on the order of 1,000 cores each.

Suggested topics include but are not limited to private and shared cache hierarchies; scalable memory coherence protocols, directory-based and otherwise; data layout and placement techniques; on-chip interconnects to support shared-memory abstractions; and hardware, software, and hybrid approaches.

Articles are due by 1 March 2013. Visit www.computer.org/computer/cfp10 to view the complete call for papers.

CALLS FOR ARTICLES FOR OTHER IEEE CS PUBLICATIONS

IEEE Pervasive Computing plans an October-December 2013 special issue on cloud computing.

SUBMISSION INSTRUCTIONS

The Call and Calendar section lists conferences, symposia, and workshops that the IEEE Computer Society sponsors or cooperates in presenting.

Visit www.computer.org/conferences for instructions on how to submit conference or call listings as well as a more complete listing of upcoming computing-related conferences.
Arguably, two of the most important technological developments of the past few years are the emergence of mobile and cloud computing. By shifting the hardware and staffing costs of managing computational infrastructure to third parties such as Google, Microsoft, and Amazon, cloud computing has made it possible for small organizations and individuals to deploy world-scale services; all they need to pay is the marginal cost of actual resource usage. At the same time, the deployment of 3G and 4G networks, rapid adoption of feature-rich smartphones, and growing integration of computation into consumer products such as cars and home appliances have brought mobile and pervasive computing into the mainstream.

This special issue aims to explore the intersections of these two trends. Mobile and embedded devices make it possible for users to access cloud-based services and data anywhere and anytime, extending their reach into everyday life. Simultaneously, cloud computing offers a natural platform to remedy the lack of local resources in mobile and pervasive devices while enabling resource-intensive next-generation applications.

Welcomed are original, high-quality submissions addressing all aspects of this field, as long as the connection to the focus topic is clear and emphasized.

Articles are due 1 December 2012. Visit www.computer.org/portal/web/computingnow/pccfp4 to view the complete call for papers.

*IEEE Internet Computing* plans a September/October 2013 special issue on dynamic collective work.

As the Internet has changed the way in which data circulates, we have shifted from a world of paper documents to one of online documents, databases, and provenance systems. This has also increased the size and complexity of systems that support today’s globally distributed, rapidly changing, and agile collaborative enterprises. Such systems are becoming increasingly federated and are generating a huge amount of data at different granularity levels that include tweets, blog posts, instant messages, Facebook updates, and other social media content. These systems and data are fueling explosive growth in dynamic collective work in the healthcare, insurance, banking, and other industries.

Dynamic and collective activities are characterized by their flexibility and people-driven nature. Automobile insurance claims handling, order processing of prescription drugs, hospital patient case management, and recovery and response assistance during natural disasters are just a few examples. In these and other tasks, various factors determine the set of actions that must be performed and the order in which they’re executed, including human judgment and document contents.

This special issue seeks original articles describing research efforts and experiences concerning Internet-supported dynamic collective work.

Articles are due 4 January 2013.
Articles are due 8 January 2013. Visit http://www.computer.org/portal/web/computingnow/micfp4 to view the complete call for papers.

IEEE Internet Computing plans a November/December 2013 special issue on smart cities.

Smart cities are currently the focus of a broad research community as well as of many government and industry innovation agendas. The Internet plays a fundamental role in communication, information sharing and processing, data transfer and analysis, and distributed computing in many of today’s cities. The rise of the Internet of Things and the large-scale adoption of Web technologies in urban environments have proved that Internet-based solutions can successfully address smart cities’ multifaceted, cross-domain challenges.

This special issue seeks submissions about recent or ongoing research efforts and experiences in applying Internet technologies to realize the smart city vision.

Email the guest editors (ic6-2013@computer.org) a brief description of the article you plan to submit by 15 February 2013. Articles are due 1 March 2013. Visit www.computer.org/portal/web/computingnow/iccfp6 to view the complete call for papers.

**CALENDAR**

**DECEMBER 2012**


10-12 Dec: ICIOS 2012, 1st IEEE Int’l Conf. on Internet Operating Systems, Irvine, California; http://icios.wordpress.com

11-14 Dec: ICDM 2012, IEEE Conf. on Data Mining, Brussels; http://icdm2012.ua.ac.be

17-19 Dec: SOCA 2012, 5th IEEE Conf. on Service-Oriented Computing and Applications, Taipei, Taiwan; http://conferences.computer.org/soca

17-20 Dec: DASC 2012, 10th IEEE Int’l Conf. on Dependable, Autonomic and Secure Computing, Changzhou, China; http://cse.stfx.ca/~dasc2012


**JANUARY 2013**


**FEBRUARY 2013**


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**Showcase Your Multimedia Content on Computing Now!**

*IEEE Computer Graphics and Applications* seeks computer graphics-related multimedia content (videos, animations, simulations, podcasts, and so on) to feature on its Computing Now page, www.computer.org/portal/web/computingnow/cga.

If you’re interested, contact us at cga@computer.org. All content will be reviewed for relevance and quality.

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IEEE Computer Graphics and Applications