GUEST EDITORS’ INTRODUCTION

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IT professionals will continue to be in demand in the coming years. According to the US Bureau of Labor Statistics, “Employment of computer and information systems managers is expected to grow 17 percent over the 2008–2018 decade, which is faster than the average for all occupations.”

Selected fields within the IT profession, such as cybersecurity, will be in even greater demand. According to a Center for Strategic and International Studies publication, there’s a shortage of approximately 30,000 cybersecurity professionals in the Washington, D.C. area alone.

Even within the fast-growing and broad information and computing sector, IT-oriented jobs are strongly represented. The occupational category that includes data processing, Web and application hosting, and streaming services is expected to grow 53 percent, second behind only biomedical engineers among all occupations. These job projections are more than double the expected number of computing graduates over this period.

As we look ahead, how we educate future IT professionals will have a profound impact on our society. IT employers often complain that IT graduates generally lack critical-thinking, project-management, team-building, and interpersonal communication (both oral and written) skills. Universities and corporate training programs must focus on these skills and on emerging IT concerns in our global environment. As such, this special issue of IT Professional focuses on future educational issues for IT practitioners.

This special issue provides perspectives from industry, government, and academia in terms of how we should educate IT professionals in the coming years. Certain trends seem apparent—for example, e-learning and social media engagement will continue to play growing roles in educating future IT professionals. The use of experiential learning—for example, through capstone projects and e-mentoring—will also continue to be an integral part of the IT education process. And, in the next few years, educators will increasingly use cloud computing, e-books, virtual worlds, mobile computing, Web 2.0 tools, and other emerging technologies to train IT professionals.

We hope this special issue provides some enlightenment to IT educators and practitioners in terms of exploring creative ways to better educate our future IT workforce.
References

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Selected CS articles and columns are available for free at http://ComputingNow.computer.org.

Call for Training Materials
Submissions Due: 30 December 2011
Online Publication: From January 2012

IT Professional magazine seeks IT training materials for practitioners for posting on Computing Now (http://computingnow.computer.org). Specifically, we are looking for 30- to 45-minute multimedia training sessions that present procedures and strategies that address common problems faced by IT professionals around the world. Topics of interest include (but are not limited to) the following:

- Cloud computing
- Mobile computing
- IT in emerging markets
- Cybersecurity
- Application development and deployment

Submissions must be practical in nature; overly complex, purely research-oriented, or theoretical treatments are not appropriate. In addition, they should include one or more of the following elements: video, audio, or PowerPoint slides.

Submissions deemed within scope of this project will be reviewed by members of the IT Professional editorial board and may be edited for clarity, organization, and length.

Questions and Submissions
For more information, contact Associate Editor in Chief San Murugesan at san1@internode.net. Upload submissions to ftp://ieeeecs:benefit@ftp.computer.org/mags/incoming/ITPro/Training_materials along with a two-page description of the session (including scope, coverage, target audience, intended benefits, and brief bio of author(s)) and send San an email (with “IT Pro training” in the subject line) that you’ve uploaded files for review.