Editorial

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Biographical notes: Alisha D. Malloy is an Associate Professor at North Carolina Central University (NCCU). She is an IBM Emerging Technology Institute (ETI) Visiting Researcher responsible for portfolio innovation through ad tech development and IBM research projects, academic research collaborations, acquisitions, etc. She holds a PhD in Computer Information Systems from Georgia State University, Master's in Engineering Management from Old Dominion University and a Bachelor's in Engineering from the US Naval Academy. Her research interests include cloud computing, healthcare informatics, IT adoption and diffusion in K-16, networking and telecommunications. She has published in *Journal of Information Technology Education*, *ACM/Kluwer Journal on Mobile Networks and Applications (MONET)*, *Computers*, *Encyclopedia of Information Systems* and several other publications. She is a member of the PhD Project, the Association of Computing Machinery, the Association for Information Systems and the Institute of Electrical and Electronics Engineers.

Andy Rindos is currently the Program Director for the IBM Middleware Chief Technology Office, and also heads the Research Triangle Park Center for Advanced Studies (CAS; IBM North Carolina university relations) and IBM Cloud Academy. Most recently, he was the WW CAS Leader (for 29 centres), and has previously headed the WebSphere Technology Institute as well as performance for Tivoli and Networking Hardware divisions. He is an IBM Senior Technical Staff Member, as well as an NC State Adjunct Associate Professor. He joined IBM in 1988, after receiving his PhD in Electrical Engineering from the University of Maryland. Prior to IBM, he was a Neurophysiologist at the National Institutes of Health in Bethesda MD.

Cloud computing continues to be a disruptive technology, enabling business organisations as well as K-12 and higher education to be more responsive than ever to user/customer demands. It also continues to live up to its promises of economic

advantages, speed, agility, flexibility, scalability and innovation. In Gartner's 'Top 10 Strategic Technology Trends for 2014', four of the ten technology trends were related to cloud computing. Gartner defines a strategic technology as one with the potential for significant impact on the enterprise in the next three years. Factors that denote significant impact include a high potential for disruption to IT or the business, the need for a major dollar investment, or the risk of being late to adopt.

Cloud computing aligns with the mandate that most educational institutions are faced with: reducing the costs of information technology, optimising services, as well as making information and resources available and secure whenever and wherever they are needed.

The mission of the IBM Cloud Academy is to provide educational organisations, K-12 schools and higher education institutions that are interested in or actively integrating cloud technologies into their infrastructures to share best practices in the use of clouds and to collaborate with partners to create innovative cloud technologies and models. These best practices range from consolidation and conservation of resources to improving student success to accelerating scientific research. These are just some of the challenges that cloud computing can help schools and universities address and that therefore shaped the agenda of the IBM Cloud Academy.

ICA CON was established to provide the IBM Cloud Academy community with a forum for getting together on annual basis to share global research, experiences and best practices around this transformational and disruptive IT paradigm. The 2nd International IBM Cloud Academy Conference (ICA CON 2014) was therefore held in Atlanta, GA on May 8–9, 2014 on the campus of Georgia State University. That conference brought together over 150 presenters and participants from 20 countries. The conference had over 30 oral presentations, numerous poster sessions and featured invited keynote talks by industry and academic experts. The conference continued to confirm that cloud computing is indeed delivering its promises within the education arena. While many advancements have been accomplished, there is still more work necessary to ensure that campus-wide cloud computing adoption is not only achieved but is sustainable.

From ICA CON 214, eight papers were selected for this special issue that target the following research issues in cloud computing:

- analytics and predictive analytics in cloud environments
- cloud computing implementation strategies
- pedagogical impact of cloud computing
- standards and open source strategies for cloud computing
- systems management in a cloud computing environment.

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