Introduction to IS Education and Training Minitrack

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Welcome to the Software Technology Minitrack on Information Systems (IS) Education and Training. The goal of this new minitrack is to explore different methods and strategies with which to teach IS topics in different environments using a variety of teaching tools and modalities to students with increasingly diverse backgrounds. As information technology has found its way into nearly every discipline and aspect of life -- and every curriculum, to one extent or another -- we face the challenge of how to teach this topic to students who bring different levels of experience, knowledge, and skill related to IS -- and we must explore appropriate ways to transfer relevant knowledge to these students, keep curriculum current adjust to changing student attitudes and industry expectations of them. Today’s students are highly computer literate, globally connected, and extensive users of social media. They have come to expect that that all information is readily available, accurate, secure and timely. They are not motivated to learn about technologies they consider mundane. When they graduate they find they will work in a world characterized by global competition, regulatory requirements, information security, highly distributed workforces and tough economics.

To this end, this minitrack presents seven papers covering a broad spectrum of perspectives about IS education and training:

• *A Longitudinal Study of Digital Natives’ and Digital Immigrants’ Adoption of Learning Management System* explores the impact of individual orientation towards technology use (i.e., so-called digital natives and digital immigrants) on technology use behavior.

• *Investigating User Acceptance of a Screenshot-based Interaction System in the Context of Advanced Computer Software Learning* presents a study on the impact of using screenshot-based interaction as the medium for describing problems and troubleshooting in the context of computer software education.

• *Exploring the Feasibility of Conducting Software Training in a Peer Learning Context with the Aid of Student-produced Screencasts* continues to address software engineering education with a study about the feasibility of using student-produced screencasts to support software training in a peer-learning context.

• *Unbundled Services: A Stakeholders’ Framework for Understanding the Impact of MOOC-like, Third-Party Online Courses* explores the impact of massive open online courses on the role of traditional academia. MOOC-like courses available from third-party providers means that the services universities offer students have the potential to become unbundled. How this will impact the future of higher education is yet unknown but an important area to explore.

• *The Hidden Job Requirements for a Software Engineer* examines the continuously changing role of the software engineer’s role that extends beyond mere code development. Indeed, the job of a software engineer today requires skills extending beyond the regular job description posted in job advertisements. This paper explores those additional tasks and ways in which to prepare freshly graduated students.

• *A Proposed Curriculum in Cybersecurity Education Targeting Homeland Security Students* describes a proposed set of courses addressing a technical IS topic -- namely, cybersecurity -- to a non-technical audience. As cybersecurity becomes ingrained in all fields of study and all sectors of the workplace, we need to explore ways to teach technical subjects within the study of other disciplines rather than only within the context of science, technology, engineering and mathematics (STEM) education.

• *Developing Faculty Expertise in Information Assurance through Case Studies and Hands-on Experiences* addresses the role of hands-on exercises in information security education. This paper explores the role of such exercises in helping students grasp basic and advanced topics, as well as having a positive impact on faculty development.

We welcome participation from all areas to come discuss there IS education challenges, lessons learnt, methodologies, educational philosophies, and best practices. We hope that attendees will leave with a larger perspective and some potentially useable teaching concepts.