Keynote
CSEE&T 2012

Software Analytics in Practice and Its Implications for Education and Training

Dr. Dongmei Zhang, Senior Researcher at Microsoft Research Asia (MSR) will present this year's keynote, looking at how research on technology transfers can provide fact-based approaches to software engineering education and training.

Abstract
Software analytics is to enable software practitioners to perform data exploration and analysis in order to obtain insightful and actionable information for data-driven tasks around software and services. In this talk, based on the success of technology transfer on software analytics at Microsoft Research Asia, I will share our experiences in carrying out successful technology transfers mainly including (1) incorporation of a broad spectrum of domain knowledge and expertise, e.g., management, machine learning, large-scale data processing and computing, and information visualization; and (2) investigation into how practitioners take actions on the produced information, and providing effective support for such information-based action taking. I will talk about the implications of our experiences for software engineering education and training, such as skill-set requirements, curriculum development, and academia-Industry collaboration.

Biography
Dr. Dongmei Zhang is a Senior Researcher of Microsoft Research Asia (MSRA). She is also the research manager of the Software Analytics group at MSRA. Her research interests include data-driven software analysis, machine learning, information visualization and large-scale computing platform. She founded the Software Analytics group at MSRA in 2009. Since then she has been leading the group to research and develop innovative data exploration and analysis technologies to help improve the quality of software and services as well as the software development productivity. Her group collaborates closely with multiple product teams in Microsoft, and has developed and deployed software analytics tools which have created high business impacts and successfully been transferred to product teams.