We accepted six papers for this year’s Methods and Tools for IS Development minitrack. These papers provide an excellent overview of the current research being done in this field. Submissions to the minitrack covered a number of emerging research areas in information systems development, including system survivability, enterprise application development, and the Unified Modeling Language. Three external reviewers and both minitrack chairs refereed each of the submitted papers. The six accepted papers are organized into two sessions:

In the first session, the papers deal with important issues of information system planning, development, and assessment. Anongnart Srivihok leads off with an empirical study of success factors for the implementation of an executive information system (EIS). The author’s research model studies the effects of six predictor variables – team business skills, team communication skills, user participation, user involvement, user computer experience, and user attitude – on the successful implementation of an EIS. The strongest positive effects are found from team communication skills and user attitudes toward the EIS. Next, Radmila Juric and Jasna Kuljis present their research on the development of an instrument to evaluate how well commercial ICASE tools support the emerging Unified Modeling Language (UML) standards. While many ICASE tools make claims of UML support, it is important to provide organizations with an independent evaluation of such claims. The authors base the evaluation instrument on rules derived from the UML version 1.1 semantics document. The instrument is tested on a sample of current ICASE tools. The third paper in the session investigates how information systems planning changes with the use of Enterprise Resource Planning (ERP) software packages. Nicola Gibson, Chris Holland, and Ben Light argue that IS development in the presence of ERP systems presents a very different set of problems and opportunities when compared to traditional IS development methods. The new ERP development approach must seek to balance business process design, software configuration, and project management of IS implementation with the overall strategy and structure of the organization.

The second session brings together papers on more technical aspects of information systems development. Robert Oshana and Richard Linger present convincing evidence that Cleanroom engineering principles, practices, and processes map naturally into the Software Engineering Institute’s Capability Maturity Model (CMM) levels. Based upon actual project experience, the authors discuss how Cleanroom features can be tailored to support CMM levels 4 and 5. The protection and survivability of highly distributed information systems in the presence of attacks, failures, or accidents is an emerging area of very important research attention. David Fisher and Howard Lipson provide a comprehensive overview of this research field. They discuss the need and importance of survivability, define the basic concepts, and examine the characteristics that differentiate survivability from other software quality attributes. The paper introduces emergent algorithms as an approach to enhanced survivability in unbounded networks and suggests a methodology for their development. A strategy for the development of practical survivability solutions using emergent algorithms is given. The minitrack concludes with a paper by Juhani Iivari, Rudy Hirschheim, and Heinz Klein on the classification of information system development methods into the more general concept of an information system development approach. A detailed procedure for classifying a development method into an approach is presented and demonstrated via examples. The authors argue that the use of development approaches allows a more flexible, situation-specific form of method engineering in which a development method can be adapted to a specific project through the instantiation of an appropriate development approach.