

## 4 Service Summary

### 4.1 University Service

**Information Systems Undergraduate Program Director.** I am on the Undergraduate Program Committee since Fall 2001 and on the Undergraduate Recruiting Committee since Fall 2003. In these functions I was involved in the revision and development of the CSE and the ISE curricula, and in the organization and representation of the computer science department in all university-wide undergraduate recruiting and graduation events.

In May 2005, I became the ISE Undergraduate Program Director. In this new capacity, I am responsible for all activities that make ISE a strong and successful undergraduate program, including reviewing and updating the undergraduate ISE curriculum, preparing catalog updates, advising students in course planning, course transfers and internships within Long Island companies, assuring a quality student-experience both in and out of class, advising prospective students, supervising scholarship awards, representing the ISE and cooperating with the Undergraduate Student Office, cooperating with the other undergraduate programs, and organizing and representing the ISE program in the undergraduate recruiting and graduation events.

During Summer and Fall of 2005, I have developed a new ISE minor and streamlined the current ISE curriculum to better fit the new, combined BS/MBA program, that is offered at Stony Brook starting with Fall 2006. These changes considerably improved our relationship with the Business and the Technology and Society departments and attracted a larger body of students in the ISE program. Between 2006 and 2008 I worked at the most important revision of the ISE major program since its inception. This work was very fruitful and resulted in a dramatic increase of the number of ISE students over the past two years. I enjoy very much my ISE program director activity, and I do not plan to leave this position in the following three years.

**Graduate Admission Committee.** For three years, during 2001-2003, I served in the Graduate Admission Committee, the committee selecting students for our M.S. and Ph.D programs. The selection process included weekly meetings during over half of both Fall and Spring semesters, as we processed hundreds of M.S. and Ph.D applications each year. For each application we reviewed the GRE scores, the student's grades, the research activity and research interests of the student and the letters of recommendation. A special attention in the final ranking was devoted to student diversity and to the particularities of the country of application.

**Faculty Recruiting Committee.** I was on the Computer Science Department's Hiring Committee in 2000-2001. I reviewed many applications, attended numerous meetings, and interviewed every faculty candidate. Most computer science departments nationwide had multiple open positions, so it was a competitive recruiting season. Nevertheless, we succeeded in hiring three excellent new faculty: Michael Ashikhmin, Amanda Stent and Himanshu Gupta.

**PhD Qualifying Examination Committee.** I served in the PhD Qualifying Examination Committee every semester between (and including) Fall 2001 and Spring 2004. In this function I

developed and graded questions for principles of database systems, compiler design and principles of programming languages, and served as the coordinator for the Hardware and the Software exams in Spring and Fall of 2001. The activity of this committee is critical to our department, because it assures and maintains a high qualification standard among our Ph.D students.

**Preliminary and PhD Committee.** I have served on the RPE, Preliminary Exam and Thesis committee of 16 students in our department. These students include: Rahul Agarwal, Sengupta Bikram, Sean Callanan, Ziyang Duan, Xiaowan Huang, Sumit Jain, Sankalp S. Kallakuri, Shiyong Lu, Robert Pokorny, Beata Sarna-Starosta, Anu Singh, Wenkai Tan, Leena Unnikrishnan, Liqiang Wang, Ping Yang, Pei Ye.

**Library Committee.** I am on the Library Committee since Fall 2004. This committee is one of the most successful among its peers at the SUNY at Stony Brook University, as it made sure that our department has its own library. Currently, we work to develop a new strategy for maintaining high quality documentation, despite of increasing editorial costs, online publication trends and budget cuts. Part of this strategy is to form an alliance with the other SUNY campuses, allowing us to share the subscription costs to the online version of all major journals in computer science.

**International Student Exchange Programs.** An important activity I am involved in, is representing our Concurrency Research Group both locally, at Graduate Orientation Meetings, such as Fall 2001 and 2002, and internationally, by attracting students from Europe. In this respect, I worked towards establishing an international student exchange program with the Technical University of Munich, Germany and the Technical University of Cluj-Napoca, Romania. As a result, we already attracted one German, one Dutch and two Romanian graduate students.

## 4.2 Professional Service

**Program co-chair and co-organizer.** I am a co-chair of HSCC 2011, the 14th International Conference on Hybrid Systems: Computation and Control. This is internationally recognized as the leading conference dedicated to the theory and practice of embedded reactive systems involving the interplay between discrete and continuous dynamic behaviors. HSCC 2011 will be held in conjunction with CPS, the Cyber Physical Systems Week, in April in Chicago, USA. I was a co-chair of HSCB'09, the 1st International Workshop on Hybrid Systems Approaches to Computational Biology. The workshop was held in conjunction with HSCC 2009. I was a co-organizer of the Dagstuhl Seminar 06411: Specification, Verification and Testing of Open Systems, held between 8/10/06 and 13/10/06. The Dagstuhl Seminar Facility is one of the most prestigious conference centers in computer science; see <http://www.dagstuhl.de/06411/>. I was a co-organizer of ICCP'06, the IEEE 2nd International Conference on Intelligent Computer Communication and Processing and chair of the Static and Runtime Verification Track, Cluj-Napoca, Romania, September, 2006. I co-organized the Fourth International Conference on Verification, Model Checking and Abstract Interpretation (VMCAI), New York, in January 2003. Originally a workshop, VMCAI was raised to a conference status in 2003, and has since then become one of the most prestigious conferences

in computer aided software verification. I organized the Common Framework Initiative (CoFI) Meeting, München Germany, in 1996. CoFi has become in the meantime, the most prestigious algebraic specification language and development framework within the European Community, and one of the most prestigious efforts around the world.

**Program committees.** I served or will serve on 32 program committees: NFM'11: the 3rd NASA Formal Methods Symposium; FSEN'11-07: the IPM International Symposium on Fundamentals of Software Engineering; RV'10-09: the International Conference on Runtime Verification; FBTC'10-07: From Biology to Concurrency and Back, Satellite Workshop of Concur; FM'08: the 19th International Symposium on Formal Methods; NETTAB'08: International Workshop on Network Tools and Applications in Biology; HSCC'09-07: 12th-10th International Conference on Hybrid Systems: Computation and Control; ICCP'07-06: IEEE 4th-3rd International Conference on Intelligent Computer Communication and Processing; ACSD'06-04: 6th-4th International Conference on Application of Concurrency to System Design; SAC'06: Symposium on Applied Computing; VMCAI'04-03: 5th-4th International Conference on Verification, Model Checking and Abstract Interpretation; CSDUML'04-02: 3rd-1st Workshop on Critical Systems Development with UML; ISORC'00: the 3rd IEEE International Symposium on Object-oriented, Real-time distributed Computing; AMAST'00: the 8th International Conference on Algebraic Methodology And Software Technology; UML'99: the 2nd International Conference on the Unified Modeling Language; and WDS'99: Workshop on formal methods applied to Distributed Systems.

**Proposal, journal, conference and external PhD reviewer.** I served on seven panels for the National Science Foundation (NSF), two panels for the Research Council of Norway (RCN), and one panel for each of the Australian Research Council (ARC), the National Research Foundation of South Africa (NRF), the German Research Community (DFG) and the Air Force Office of Scientific Research (AFOSR). I refereed research papers for more than 20 journals (repeatedly), and 45 conferences and workshops. I was the external reviewer on the Ph.D thesis committee of three students, Yerang Hur and Bow-Yaw Wang, from the Department of Computer Science, University of Pennsylvania, and Yue Yang, from the School of Computing, University of Utah.

**Professional societies** I have been elected as a full member of the International Federation for Information Processing (IFIP) WG 2.2 "Formal Description of Programming Concepts". I am a member of Association for Computing Machinery (ACM), IEEE Computer Society, Deutscher Hochschulverband (DHV) and Gesellschaft für Informatik (GI).