## **Balasubramaniam Ramesh**

Board of Advisors Professor of Computer Information Systems Georgia State University <u>bramesh@gsu.edu</u>

## **EDUCATION**

Institution	Degree	Year	Field of Study
New York University	Ph.D.	1992	Information Systems
New York University	M. Phil.	1987	Information Systems
Indian Institute of	P.G.D.M.	1983	Finance & Control, Systems
Management, Calcutta, India	(M.B.A)		
University of Madras, India	B.S	1981	Mechanical Engineering
	(Engineering)		

## **PROFESSIONAL EXPERIENCE**

1997 - present	Associate Professor, Professor, Board of Advisors Professor, Computer
	Information Systems, GSU
1991 - 97	Assistant Professor, Associate Professor, Systems Management, Naval
	Postgraduate School, Monterey, CA
1989	Instructor, Stern School of Business, New York University
1983 - 85	Consultant, Management Consulting , A. F. Ferguson & Co, India

# **Awards and Honors**

## Teaching

- GSU Outstanding Faculty Achievement Award for "extraordinary contributions to teaching, research and service," 2002. GSU's top faculty award for "junior" faculty.
- o Myron T. Greene Outstanding Teaching Award, CIS Department, 2002 and 2007.
- Faculty Recognition Award for Teaching, Robinson College of Business, 2004 (top annual teaching award in the college)
- RCB Board of Advisors Excellence Award for Teaching, 2006 (awarded for the best teaching performance in the college of business over the past 3-5 years)
- o Outstanding Instructional Achievement Award, Naval Postgraduate School, 1996.

## Research

- Faculty Recognition Award for Research, Robinson College of Business, 2006 (top annual research award in the college).
- RCB Board of Advisors Excellence Award for Research, 2007 (awarded for the best research performance in the college of business over the past 3-5 years)
- o Outstanding Research Achievement Award, Naval Postgraduate School, 1995.

## Other

- o Magid Igbaria Distinguished Lecturer, Claremont Graduate University, March 2003.
- SIM Doctoral Fellow, International Conference on Information Systems, 1989.
- o Nichols Foundation Fellowship, New York University, 1988-89.

## GRANTS Teaching

- Robinson College of Business, Instructional Innovation Grant, Supporting Virtual teamwork in class projects: Peer-to-Peer Networking Tools for real-time interaction and offline collaboration, 2005.
- Robinson College of Business, Instructional Innovation Grant, Supporting Group work in class projects: Social Bookmarking and Collaborative Editing, 2008.
- GSU Quality Improvement Program for Instructional Innovation, Design Studio as a basis for learning systems development, 1999, Co-PI with S. Purao, \$23,700.
- GSU Quality Improvement Program for Instructional Innovation, An Integrated Framework for Learning Systems Development, 2000, Co-PI with R. Welke and S. Purao. \$ 21,800.

## **External Research Grants**

- Recipient of over 20 external research grants from highly competitive programs (including the National Science Foundation, Office of Naval Research, Air Force Research Laboratory, Army Research Laboratory, DARPA, Texas Instruments, Accenture)
- Total funding received over \$ 1.4 Million of which over \$ 1 Million received as soleprincipal investigator.
- o Involved over 35 students in Masters and Doctoral thesis projects
- Produced over 40 referred publications co-authored with students

# **Internal Research Grants**

- o GSU Quality Improvement Program for Research, 1998 and 2000
- 11 Summer Course Release grants for research, J. Mack Robinson College of Business, 1997-2008

# PUBLICATIONS

- 41 Refereed Journal publications, 42 referred international conference papers and book chapters, 12 others
- Of these, 17 journal publications and 23 referred international conference papers and book chapters are co-authored with students

## Selected publications in major journals co-authored with students

- 1. B. Ramesh, C. Stubbs, T. Powers, and M. Edwards, "Requirements Traceability: Theory and Practice," *Annals of Software Engineering*, vol. 3, pp. 397-415, 1997.
- A.Tiwana and B. Ramesh, "A Design Knowledge Management System to Support Collaborative Information Product Evolution," *Decision Support Systems*, Vol. 31, 2001. pp. 241-262.
- 3. B. Ramesh, R. Jain, M. Nissen, and P. Xu, "Managing Context in Business Process Management Systems," *Requirements Engineering Journal, Vol. 10, No. 3, November 2005.* pp. 212-222.
- 4. K. Mohan, P.Xu and B. Ramesh, "Improving the Change Management Process: Traceability Meets Configuration Management", *Communications of the ACM*, (forthcoming), 2008.

- 5. L. Cao and B. Ramesh, "Benefits and Challenges of Agile Requirements Engineering Practices: An Empirical Study", *IEEE Software, January/Feb* 2008, pp. 60-67.
- 6. K. Mohan, R. Jain, and B. Ramesh, "Knowledge Networking to Support Medical New Product Development," *Decision Support Systems (DSS)*, Vol. 43, No. 4, August 2007, pp 1255-1273.
- 7. P. Xu and B. Ramesh, "Software Process Tailoring: An Empirical Investigation", *Journal of Management Information Systems*, vol.24, no.2, Fall 2007, pp. 293- 328.

## COURSES TAUGHT AT GSU

Object-Oriented Specifications	Special topics course: Software Engineering
Requirements Management	Doctoral Seminar on Software Development
IT Project Management	Special topics course: Data Mining
Knowledge Systems Development and use	Systems Analysis
Knowledge Management	Managing IT Projects
Competing on Analytics and	Systems analysis and design
Organizational Knowledge	

## **TEACHING RELATED ACTIVITIES**

- o Created or extensively redesigned all of the above courses
- Developed and taught a course in the Intellectual Capital Partnership Program (ICAPP) program at UPS
- o Taught in the GSU/Alexandria Institute of Technology program in Egypt

## **Thesis Supervision**

- Chair, Doctoral dissertation committees: 5 students (4 invited to doctoral consortia; 4 received dissertation support grants from GSU; students holding tenured/tenure-track faculty positions at City University of New York (2), Univ. of Massachusetts-Boston, Old Dominion University
- Member, Doctoral Dissertation Committees: 7 students
- Chair, Masters thesis projects : over 35 students (2 received best thesis awards)

# PROGRAM DEVELOPMENT, STUDENT RECRUITMENT AND RETENSION

- Program Director, Master of Science in Information Systems Audit and Control degree. Developed and managed the creation of this new degree program which is a joint venture of the Department of CIS and the School of Accountancy. Established cooperation with several leading public accounting firms and corporations for internships and recruitment.
- Member, Health Informatics initiative committee, 2006-present. This committee developed and implemented concentration in health informatics in the M.S, MBA and BBA programs.
- Chair, CIS Department graduate program committee which overseas curriculum development, recruitment and retention
- Actively involved in a number of initiatives to increase student enrollment partnership program with a high school focused on STEM education, international student recruitment, joint program development with a premier institution in India

### **Reflective Statement**

I am honored to be nominated for the 2008 Regents Teaching Excellence Award. I consider it a privilege to contribute to the Computer Information Department's undergraduate program (ranked 10<sup>th</sup> in the nation), graduate program (ranked 9<sup>th</sup> in the nation), and research activities (ranked 1<sup>st</sup> in the world in research productivity, and 2<sup>nd</sup> in the world in citations) through teaching, curriculum and program development, and mentoring. I briefly describe below these activities, my teaching and learning philosophy, and the impact on students.

## **Teaching and Learning Philosophy**

As a professional educator I relate to my students as bright and ethically responsible individuals, colleagues, and business professionals of tomorrow. I see my role in the process of education as that of a mentor. My teaching and learning philosophy and strategies have evolved over the twenty years that I have been engaged in this exciting career, and have been shaped by both positive and negative experiences.

Business students are focused on solving practical problems. Since the practical problems that my students face in the workplace cross disciplinary boundaries, I highlight various organizational, social, and political factors that influence the life of information systems professionals. These problems call for the application of knowledge that students gain in a variety of courses and from their own personal experiences. I also bring to their attention my own personal and professional experiences gained from industry engagements and related research. This has helped broaden not only their understanding but also my own understanding of the intricacies of practical problems. This exchange of knowledge and experiences has been a rewarding experience for me.

I engage in a variety of in-class exercises and activities that exemplify the application of the concepts delivered through lectures. I use several hands-on, in-class exercises so that students become more active participants in their learning through experimentation, inquiry, dialogue, and constant questioning. These exercises have enhanced one-on-one interaction with students tremendously. I believe that classrooms interactions should be the beginning, not the end of learning; as such, I strive to help students gain the motivation, passion, determination, skills, and critical thinking and learning capabilities that are necessary for them to pursue lifelong learning. I also believe that learning is an interactive and collaborative process. Students learn from the interaction with the instructor as well as with their classmates, inside and outside of the classroom. In my teaching, I try my best to create an interactive environment in which students feel free to seek help, express their opinions, and collaborate with others. To promote learning in such an environment, I use several tools and techniques including podcasting, team projects, peer-to-peer networking, collaborative authoring, design juries, and in-class walkthroughs. These techniques help students build linkages between the abstract concepts and personal experiences so that that knowledge is assimilated in a situated manner.

I require students to carefully study the peculiarities of the problem at hand. I ask them how their solutions would change if some of the problem characteristics were to change. I challenge their critical thinking by giving them open-ended questions answering which requires informed judgment. I challenge students to think like real professionals by subjecting them to exercises that reflect the complexities of the real world. I invite practicing business professionals to share their experiences with the students and to emphasize the importance of academic knowledge in practical problem-solving. Also, my teaching and research synergistically benefit each other. My research keeps me up-to-date with cutting-edge technologies, popular development methods, and hot issues in the field. I incorporate related articles, stories and case studies in my teaching material. This helps me deliver content that not only covers the fundamental concepts, but also shows how these shape the workplace the students will be engaged in.

I help my students realize that their education continues well beyond the classroom. I encourage my students to get actively involved in various Information Systems community events held on-campus. This gives them an opportunity to interact with like-minded colleagues. I also urge them to become members of various professional organizations. In my role as an educator, I also help my students develop a robust moral vision for their role in the society. I ensure that my students understand that information and communications technologies affect not only organizations' financial bottom-line but also influence the society. I emphasize that their role is not to merely design, develop, or use information systems, but also to see that information systems are employed ethically. I draw upon ethical codes of conduct established by professional organizations such as the IEEE and the ACM as well as various real-life examples to highlight this critical aspect. This often sparks passionate discussions on the ethical use of technology, for example, in the workplace and at school. I believe that such discussions can help students mature into responsible IT professionals.

In summary, the essence of my teaching philosophy is to cultivate problem-solving and critical thinking skills by intellectually challenging my students in a collaborative learning environment. I believe that the essence of my teaching philosophy is aptly captured by the Chinese proverb "*Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime.*"

### **Student Recruitment and Mentoring**

Over the past decade or so at GSU, the above philosophy has guided my interactions with the students inside and outside the classroom. Whereas, in the early stages of my career, I was primarily teaching in the graduate programs due to scheduling considerations, I have recently been focusing on undergraduate education. This has given me the wonderful opportunity to work with an even more diverse set of students. They are diverse not only in their race, gender, religion, and nationality, but also in their academic backgrounds. While this diversity requires a lot more care in the way my classes are structured and conducted, it also provides a wonderful learning environment for the students who need to be prepared to work in such an environment in their careers. Personally, it has been very gratifying to me to be able to influence the lives of such a varied set of brilliant students,

The focus on diversity also relates to the diversity we have been trying to create in our programs. I actively participate in two major initiatives for creating interdisciplinary educational programs. First, I have championed the creation of a new Master of Science in Information Systems Audit and Control degree program. In my capacity as the Program Director, I have managed all aspects of the creation and implementation of this program which is a joint venture between the CIS department and the School of Accountancy. Though the program has just enrolled its first group of students, our efforts to create strong collaborations with the industry for developing relevant content, offering internships and placement opportunities have been very well received. I have already obtained enthusiastic commitments from several leading public

accounting firms and corporations on all these fronts. In fact, many of these world class firms are interested in recruiting a lot more students than we can produce! The second initiative is in another exciting field, namely, Health Informatics. Here, I serve as an active member of a committee that has created several educational offerings. We are already enrolling students in this concentration in the BBA, MS and MBA programs. We expect these efforts to result in attracting a large number of students to this increasingly important field.

In addition to my deep involvement in creating new inter-disciplinary programs, I am also actively participating in our efforts to recruit high quality students into the exciting field of information systems. I would like to highlight two efforts. First, I am heading an effort to attract high quality high school students into our undergraduate program. As a first step, we are participating in the partnership program of the Gwinnett School of Mathematics, Science and Technology (GSMST). I serve as a member of the Advisory Board of GSMST and am working on creating joint enrollment courses in Computer Information Systems for their gifted students. The school administration is also excited about the possibility of creating a world class program focused on STEM (Science, Technology, Engineering and Mathematics), which is a national priority. Second, we are committed to attracting international students to our graduate programs. As the chair of the CIS department's graduate program committee, I have initiated a number of efforts for this purpose. In addition, I am also engaged with student professional societies such as the CIS society and the Beta Alpha Psi, (the honorary organization for accounting students and professionals) to promote our programs. Finally, we are also reaching out to regional universities and colleges to attract transfer students. Though we have created world class programs, rather than relying on "if we build it right, they will come" approach, I am actively engaged in attracting and retaining a diverse and talented set of students to our exciting field.

My mentoring roles extend to helping students become productive scholars in the field. I have actively encouraged students to participate in my research projects and co-author publications. My research projects have supported 35 students in their Maters and Doctoral theses, and have resulted in nearly 40 referred publications in which my students are co-authors.

#### To what end?

The response from my students to my approach to teaching and learning has been overwhelmingly positive. Besides rating my classes at or near top of all similar courses taught in my department and the college, the qualitative feedback I receive from them has been very heartening. I am quite thrilled when I (frequently) receive emails from my former students, sometimes several years after graduation, telling me how much they benefited from the state-ofthe-art content and the exposure to exciting opportunities in the field of information system that were provided by my courses. Many of these students are employed in some of the best known companies worldwide. Many even ask for access to my course website several years after graduation so that they can keep themselves updated on current concepts, technologies and methods. I am also quite pleased to learn that many students are able to qualify for much valued professional certifications by using the material covered in my classes. Also, several students have stated that my courses have been instrumental in their successful job search.

On a personal note, I find teaching a very fulfilling experience. I very much value the opportunity to influence students, even though in a small measure, and introduce them to a world of exciting possibilities. It is a unique reward that no other profession can offer.