

# Troy University, Montgomery Campus



## Presents The Sixth Annual CIS Colloquium on Information Technology

**Professor Emeritus C.V. Ramamoorthy**  
**Computer Science Division**  
**University of California, Berkeley**

**Monday, February 7, 2005**  
**5:30 - 6:30 p.m.**

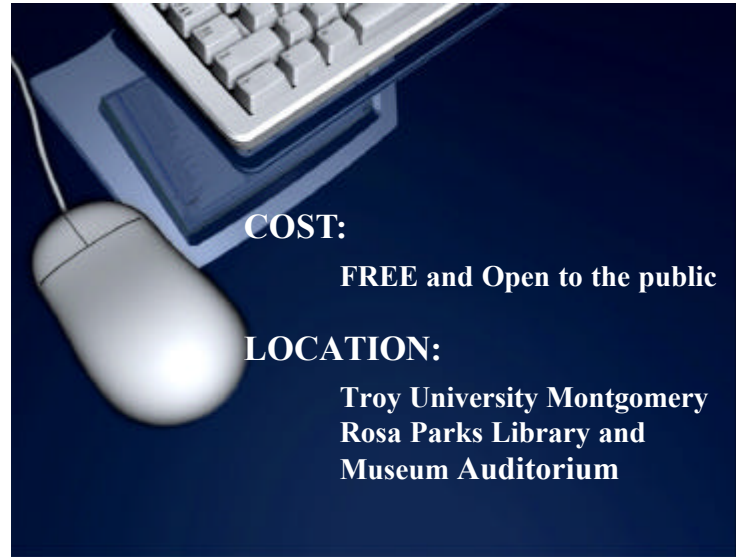
### **“Quality Concerns in Software Supported Systems - Modeling Approach”** (Student Audience)

We introduce three new models. The first is the Dynamic Life Cycle Product Model. This model considers the life cycle quality considerations of the product, the product line and the product family. The second is the Endo-Exo Model, which is based on analogous notions of the Heisenberg Uncertainty Principle. These models explore the multiple views of quality as seen by different stakeholders. In simpler terms, they are the models of 'inside-out' views as seen by the designers and the 'outside-in' views as seen by the users and others. The third model is the Delta model, which helps designers and modifiers (maintainers) to make fast but effective trade-off decisions while performing major design tasks. These models are simple geometric models, and many of them use triangles as the primary tool. We provide examples for these models and show how that they give valuable insights.

**Tuesday, February 8, 2005**  
**11:30 - 12:15 p.m.**

### **“Quality Concerns in Software Supported Systems - Business Approach”** (Local IT Industry, Community Audience and Montgomery Area Chamber of Commerce)

Complex systems, services and enterprises are very dependent on computer-communication technology and in particular on their supporting and controlling software. The system quality or the degree of its user satisfaction, also called its utility, often is based on the effectiveness of its software component. The quality of the system is felt only after the system or the product is introduced and used. Designers attempt to introduce quality-creating attributes during every phase of development and implementation. Quality models should anticipate quality concerns ahead of the product introduction and its use. They also should help in instrumenting and monitoring the effectiveness of quality measures during the lifetime of the products, product lines and product families. In this presentation, we shall provide a historical overview of the evolution of software quality and its essential quality attributes to improve customer satisfaction.



**COST:**

**FREE and Open to the public**

**LOCATION:**

**Troy University Montgomery  
Rosa Parks Library and  
Museum Auditorium**

**C. V. Ramamoorthy**, Professor Emeritus, received two M.S. degrees, one in Mechanical Engineering from the University of California, Berkeley, CA, and another M.S. and a Ph.D. degree in applied mathematics and computer science from Harvard University, Cambridge, MA. He is the author of more than 200 journal papers, co-editor of three books, as well as a supervisor to 79 doctoral students. He is the recipient of many awards and honors: IEEE Centennial and Millennium, 2000; IEEE Computer Society's Group and Taylor-Booth and Kanai-Hitachi, 2000; Golden Core Recognition, 1999; T. T. Yeh Distinguished Achievement; Distinguished Scholar, SDPS, 1995; IEEE Fellow for Life 1993; IEEE Richard E. Merwin, 1993; IEEE Computer Society Meritorious Service, 1991; Keynote Speaker, IEEE International Conference on Distributed Computing Systems, 1991; IEEE Computer Society Taylor Booth, 1990; IEEE Computer Society, Outstanding and Best Paper, 1987, 2003; IEEE Centennial Medal, 1984; Fellow, IEEE, 1978; IEEE Computer Society, Special Education, 1978; and IEEE Computer Society, Honor Roll, 1974. Professor Ramamoorthy conducts research on the evolution of computer hardware & software systems.

For additional information, please contact Dr. Mehmet Sahinoglu, Professor and Chair, Department of CIS,  
Troy University, Montgomery Campus at (334) 273-9923 or E-mail (mesa@troyst.edu).

The Colloquium is supported by the Troy University, Montgomery Campus' Department of Computer and Information Science,  
College of Arts and Sciences and The Graduate School.

[www.tsum.edu](http://www.tsum.edu)