The Volgenau School of Information Technology and Engineering

GEORGE MASON UNIVERSITY

The Volgenau School of IT & Engineering
http://volgenau.ite.gmu.edu/

Danny Menascé, Ph.D.

Senior Associate Dean

menasce@gmu.edu

www.cs.gmu.edu/faculty/menasce.html

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Our School Characteristics

- Founded over 20 years ago when IT was not a buzzword
- Not a conventional Engineering school:
  - We do not have Mechanical, Chemical, and Aeronautical Engineering
  - Our Engineering departments use IT tools heavily
- Location, location, location …
  - US Government: civil and military agencies
  - Federal Contractors
  - Second highest metropolitan area in terms of median household income.
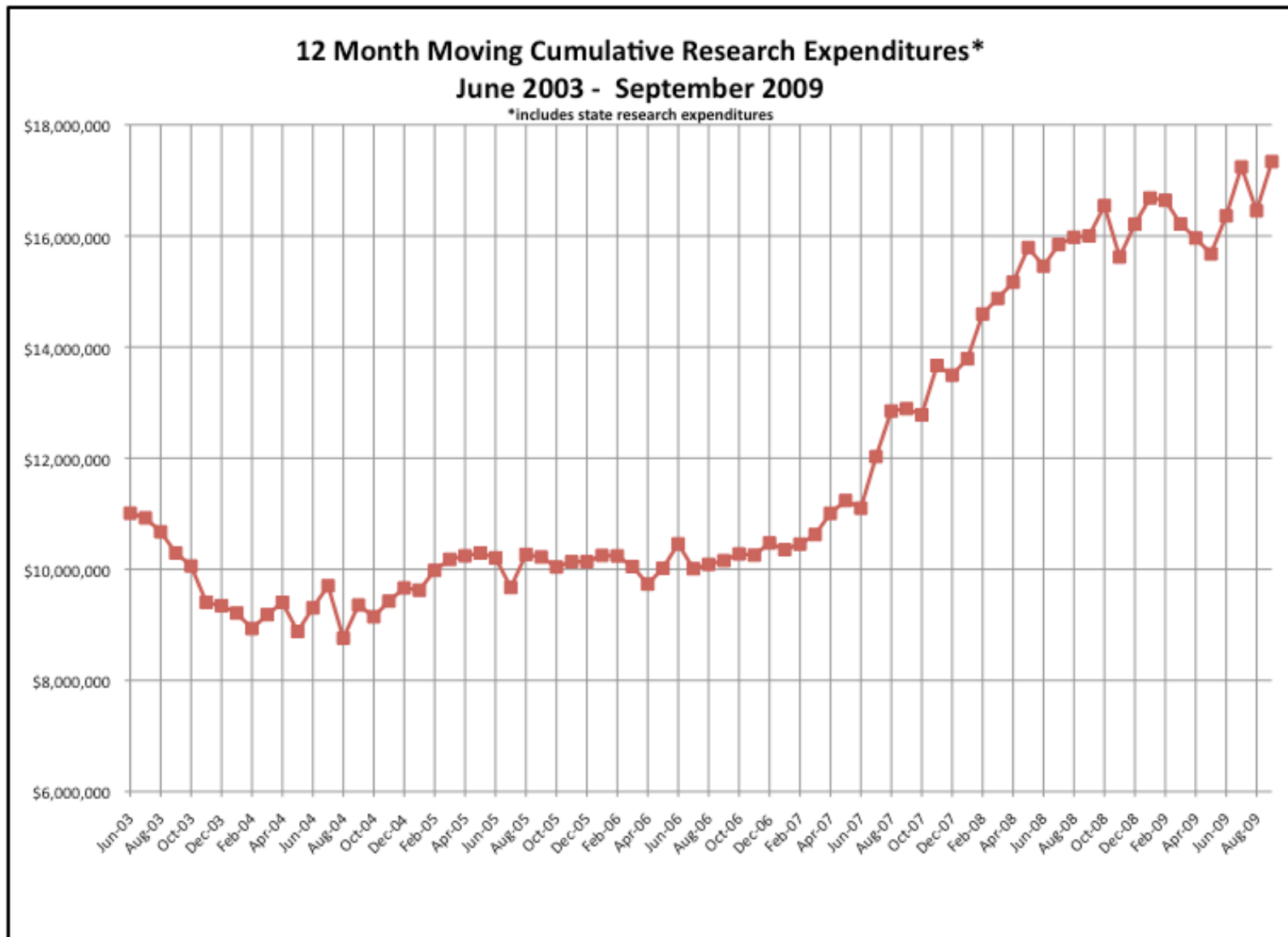
Departments in the School

- Applied Information Technology
- Civil, Environmental, and Infrastructure Engineering
- Computer Science
- Electrical and Computer Engineering
- Statistics
- Systems Engineering and Operations Research

Research Centers

- [Center of Excellence in Command, Control, Communications, Computing and Intelligence (C4I),](#) Director: Prof. Mark Pullen
- [Center for Air Transportation Systems Research](#), Director: Prof. George Donohue
- [Center for Distributed and Intelligent Computation](#), Director: Prof. Harry Wechsler
- [Center for Secure Information Systems](#), Director: Prof. Sushil Jajodia
- Center for Smart Power Grids, Director: Prof. Alex Brodsky
- [E-Center for E-Business](#), Director: Prof. Larry Kerschberg
- Intelligence and Security Research Center, Director: Dr. Bob Latiff
- [Learning Agents Center](#), Director: Prof. George Tecuci

School Statistics

- $17.3 million dollars in annual research expenditures
- Designated by the National Security Agency as
  - National Center of Academic Excellence in Information Assurance Education and as
  - National Center of Academic Excellence in Information Assurance Research
- 140+ faculty members
- 2,000 undergraduate students
- 1,700 graduate students
  - 65% domestic
  - 350 Ph.D. and 1,300 MS/Certificates/Non-degree

12 Month Moving Cumulative Research Expenditures*
June 2003 - September 2009
*includes state research expenditures

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Rankings

- No.16 in the US in number of MS degrees awarded.
- No. 21 in the US in graduate enrollments.
- No. 31 in Best Engineering Schools in Industrial & Manufacturing (US News and World Report)
- No. 54 in Computer Science (ahead of UVA and VA Tech in federal research expenditures in CS according to NSF).
- Ahead of UVA, VA Tech, VCU, GWU, UMCP in enrollments per faculty and degrees awarded per faculty.

Research Accomplishments

- Various lifetime achievement awards
- Several Fellows of scientific societies (e.g., AAS, ACM, AIAA, IEEE, and INFORMS)
- A faculty member in the National Academy of Engineering
- Several NSF CAREER Award Recipients
- Over 30 patents
- 70+ books published by our faculty
- Membership on many editorial boards of important scientific journals

Areas of Excellence

- Information Security
- Machine Learning
- Evolutionary Computing
- Air and Ground Transportation
- C4I
- E-commerce
- Biometrics
- Visualization
- Computer Networks
- Microelectronics
- Software Engineering
- Data Mining
- Databases
- Computer Graphics

- Optimization and Statistics Applied to Life Sciences
- Systems Architecting
- Control Theory
- Autonomic Computing
- Robotics
- Computer Vision
- Communications
- Digital Signal Processing
- Intelligent Transportation Systems
- Environmental Engineering
- Evolutionary Infrastructure Design
- Modeling, Optimization, and Optimization