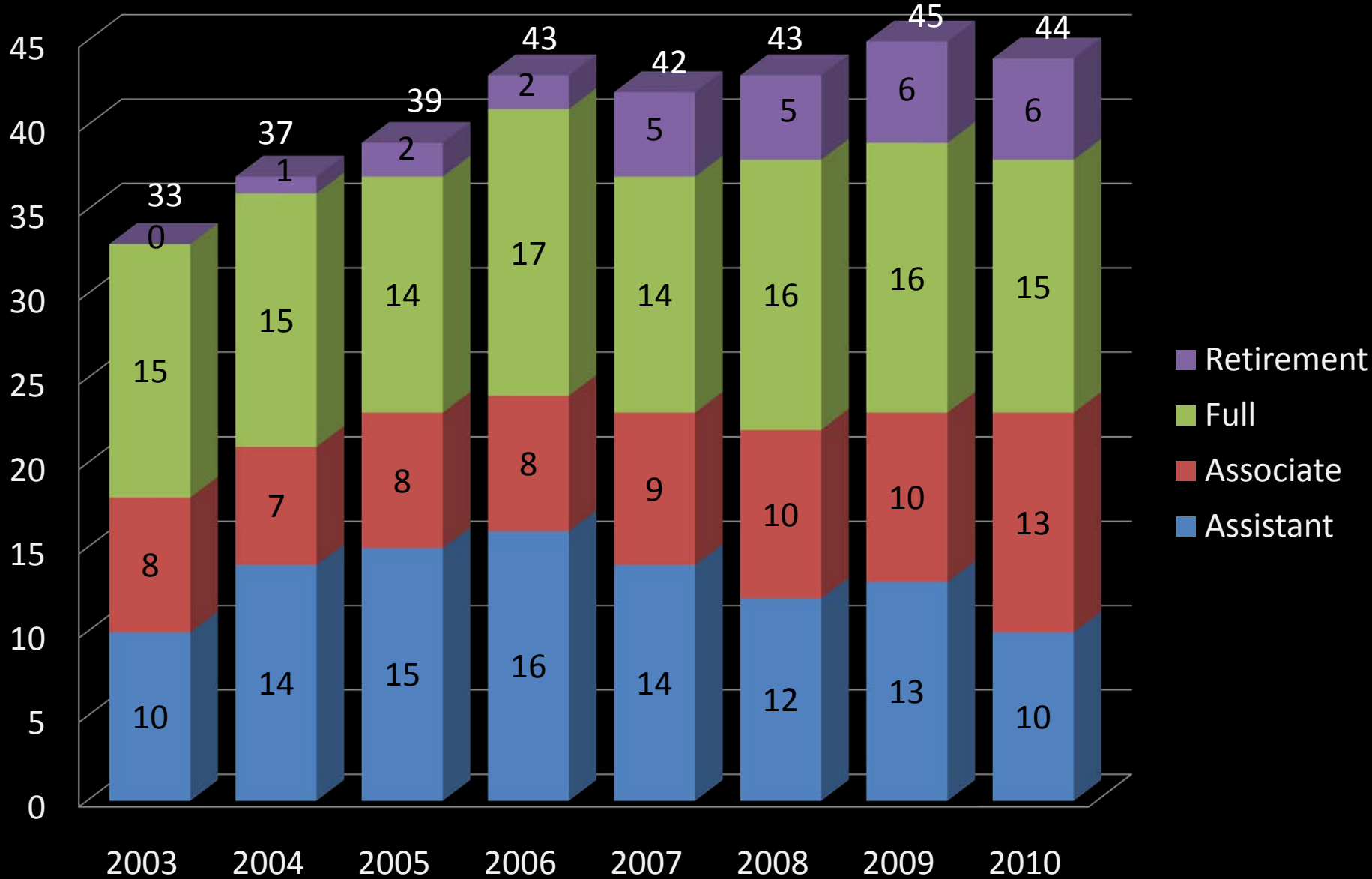




Department of

Computer Science
& Engineering

Tenure-Track Faculty Profile



Core Research Areas with Sub Areas

Intelligent Systems

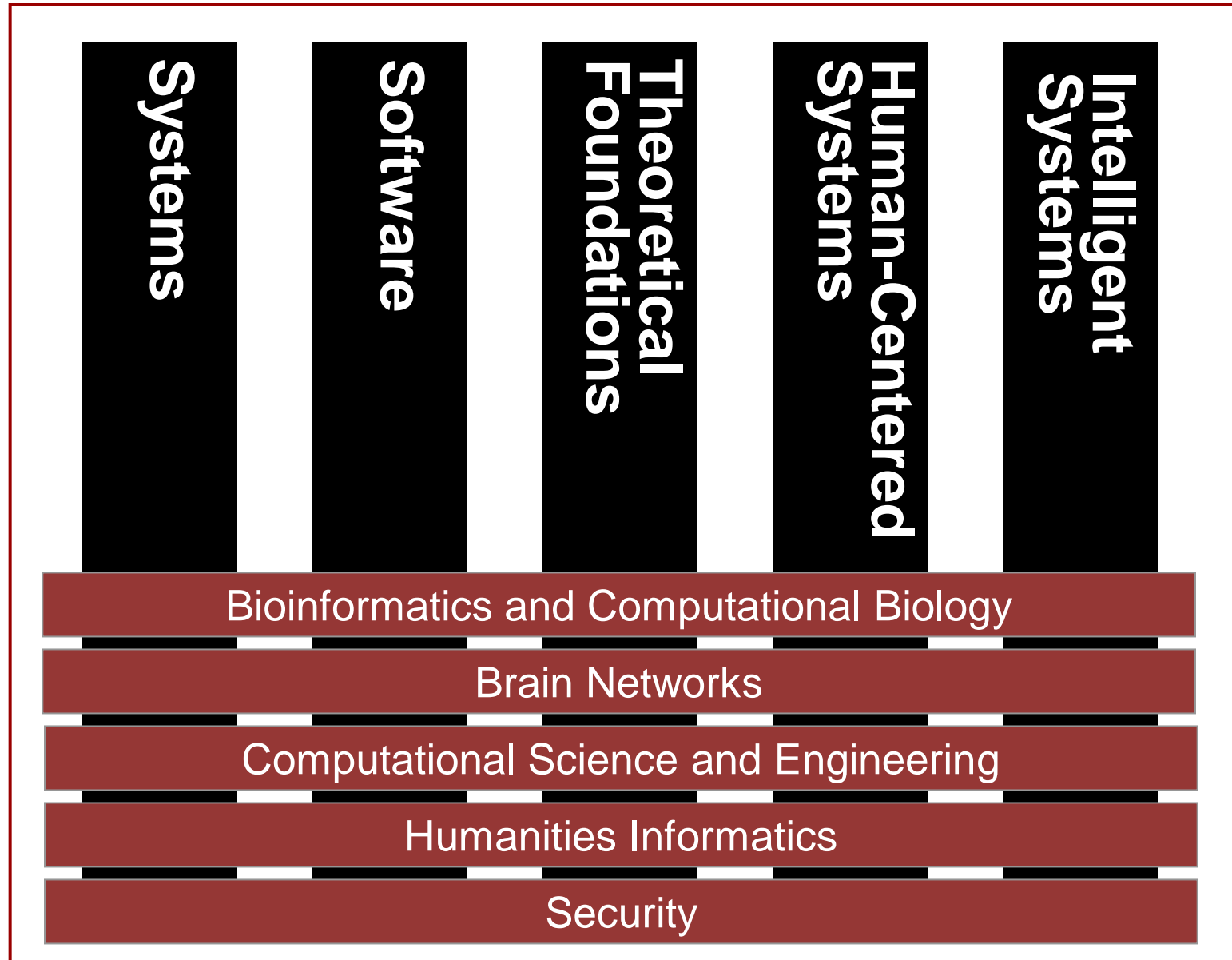
Human-Centered Systems

Theoretical Foundations

Software

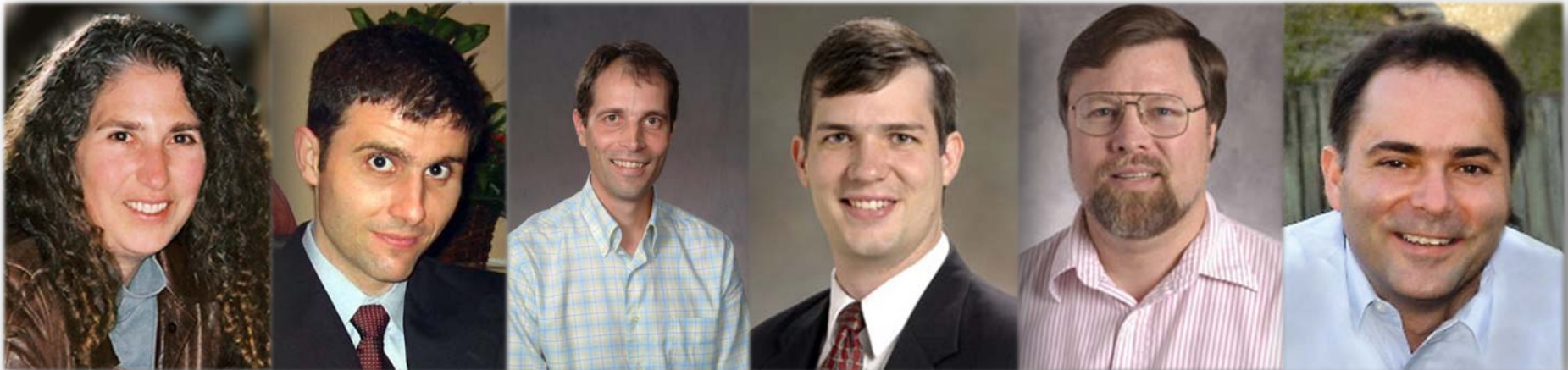
Systems

Multi-disciplinary Research Areas



Faculty Recognition by the College

- **Nancy Amato**
E.D. Brockett Professorship
TEES Senior Fellow
Association of Former Students College-Level Distinguished Teaching Award
- **Ricardo Gutierrez-Osuna**
Association of Former Students College-Level Distinguished Teaching Award
- **Jaakko Jarvi**
TEES Select Young Faculty
- **John Keyser**
William Keeler Faculty Fellow
- **Hank Walker**
Charles W. Crawford Service Award
- **Riccardo Bettati**
Director, Center for Information Assurance and Security (CIAS)



Faculty Recognition – National & International Awards

- **Valerie Taylor**
Re-elected to the Computing
Research Association (CRA)
Board of Directors
- **Robin Murphy**
A Most Influential Woman in
Technology for 2011
by Fast Company
- **Anxiao “Andrew” Jiang**
IEEE Best Paper Award in Signal
Processing and Coding for
Data Storage



Research Grants



Tiffani Williams

National Science Foundation (NSF)
Information and Intelligent Systems
Grant

Dmitri Loguinov

Two NSF Computer and Network
Systems Grants

Richard Furuta and Frank Shipman

Two NSF Information and Intelligent
Systems Grants



**Frank Shipman and Ricardo
Gutierrez-Osuna**

NSF Information and Intelligent
Systems Grant



Ricardo Gutierrez-Osuna

Qatar National Research Fund
Grant

Hank Walker

Semiconductor Research
Corporation Grant

Andreas Klappenecker

NSF Computing and
Communication Foundations Grant

Tracy Hammond

Google Research Award and
Defense Advanced Research
Projects Agency Information
Processing Techniques Office
(DARPA IPTO) Grant



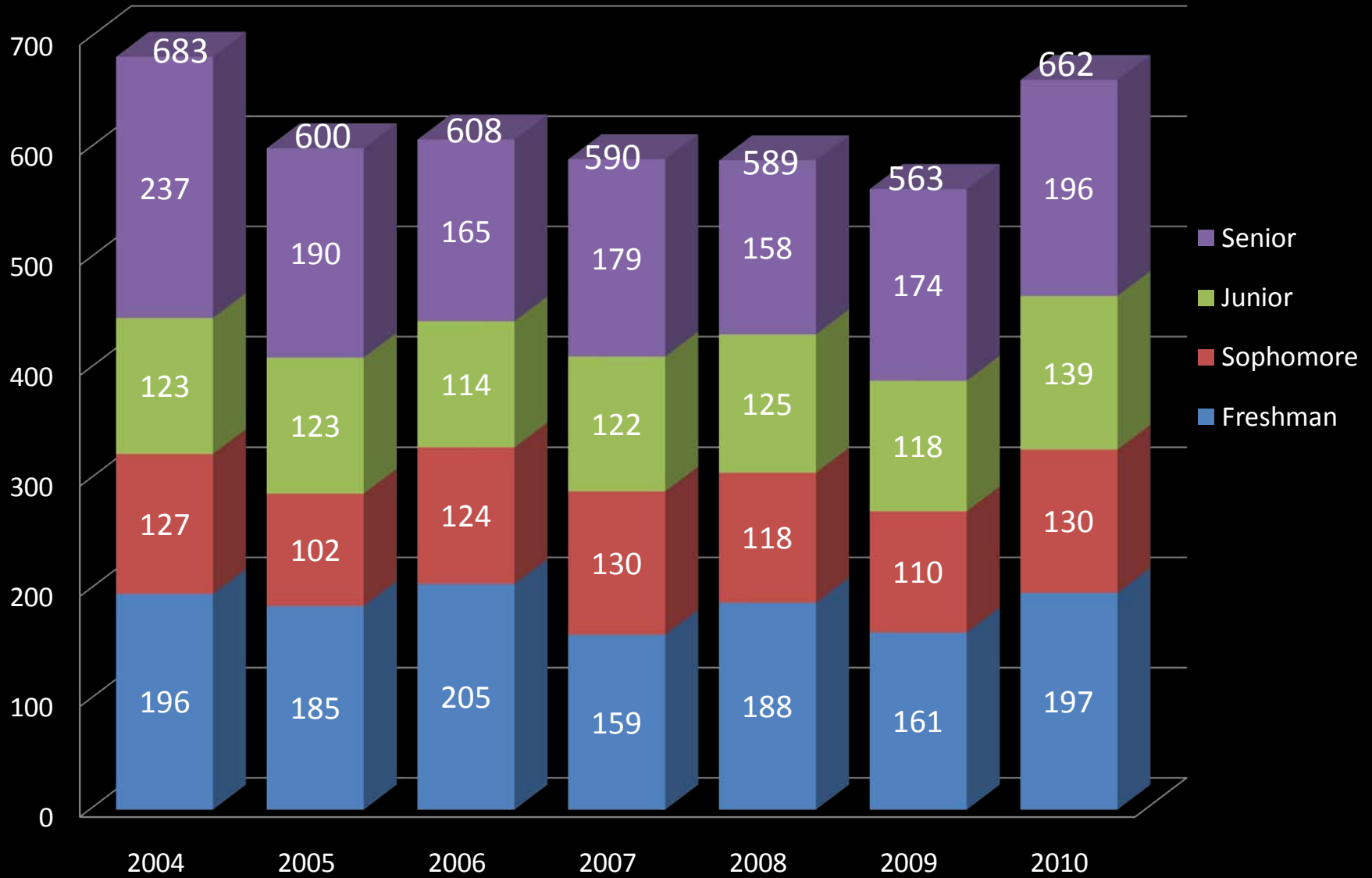
Current & Former Student Recognitions

- **Jory Denny**
Finalist, Computing Research Association (CRA) 2011 Outstanding Undergraduate Researcher Award
- **Jeffrey Deuel**
Honorable Mention, Computing Research Association (CRA) 2011 Outstanding Undergraduate Researcher Award
- **Matt Moss, Kyle Willmon, and Robert Schumacher**
6th Place, South Central USA region of the 35th annual ACM International Collegiate Programming Competition
- **Suzanne Matthews**
1st Place, Fall 2010 IAP Poster Competition
- **Grant Brammer**
2nd Place, Fall 2010 IAP Poster Competition
- **Drew Logsdon**
3rd Place, Fall 2010 IAP Poster Competition

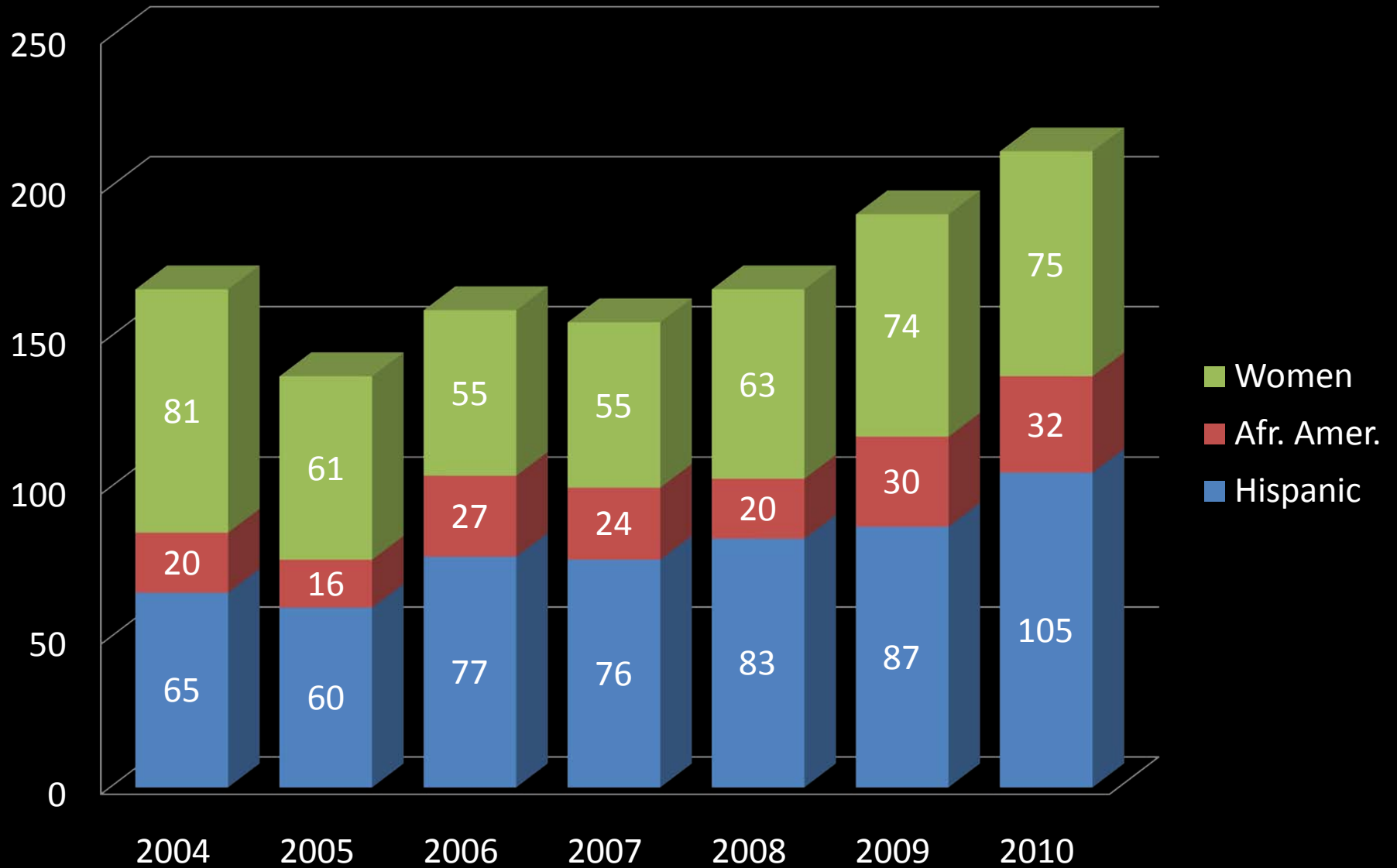
DISTINGUISHED FORMER STUDENTS

- **Jeanne Bayless**
BS – Class of 1979
Managing Partner of STAR Ventures
- **Steven Swanson**
PhD – Class of 1998
NASA Astronaut

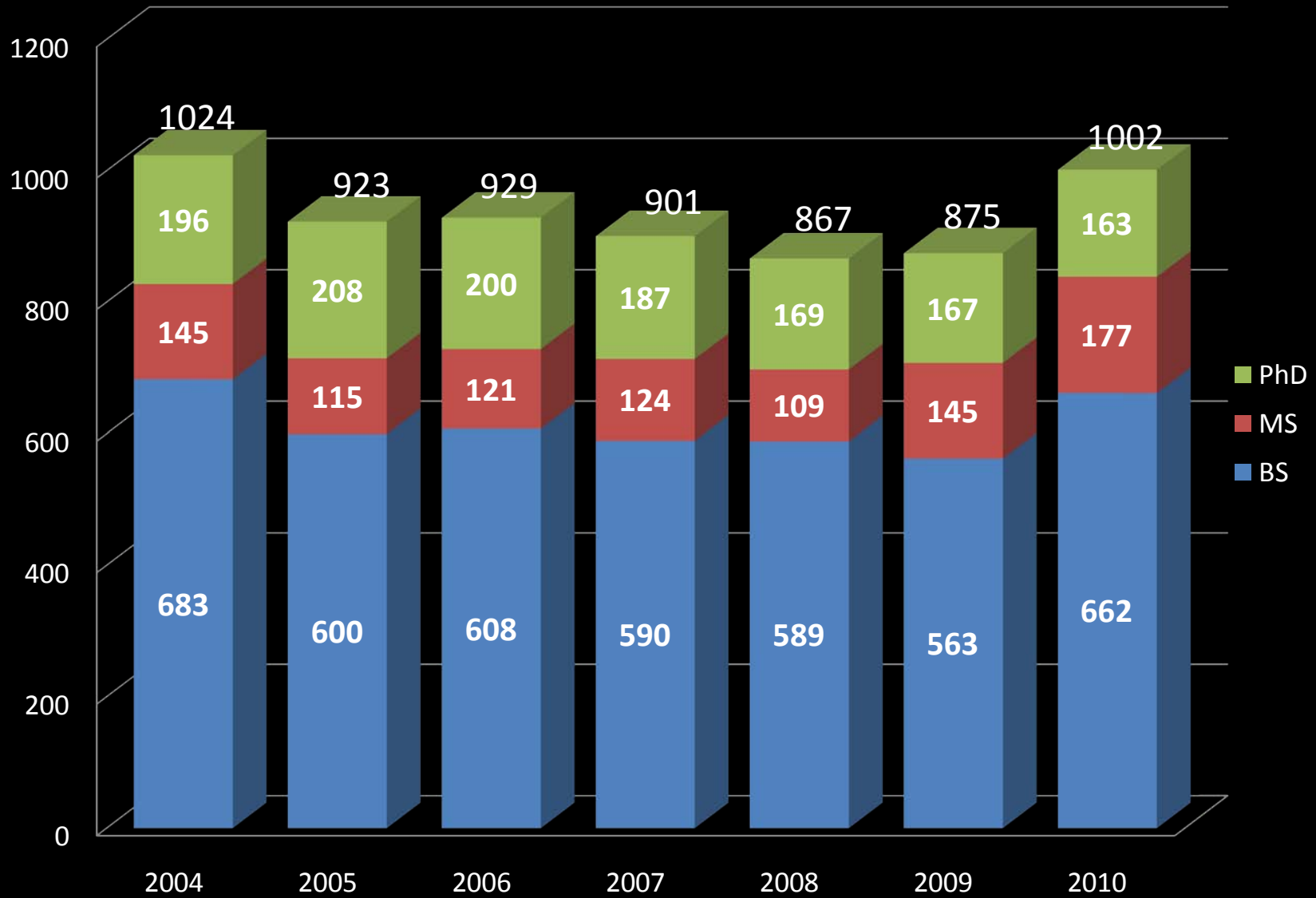
Undergraduate Enrollment History



Undergraduate Diversity History



Student Enrollment History



Student Organizations

Aggie Women in Computer Science (**AWICS**)

<http://awics.cs.tamu.edu/>

Texas A&M Computing Society (**TACS**)

Student chapter of ACM and IEEE-CS

<http://tacs.cs.tamu.edu/>

Texas Aggie Game Developers (**TAGD**)

<http://tagd.cs.tamu.edu/>

Upsilon Pi Epsilon Computer Science Honor Society (**UPE**)

<http://upe.cs.tamu.edu/>

Computer Science and Engineering Graduate Student Association (**CSEGSA**)

<http://csgsa.cs.tamu.edu/>

Research Experiences for Undergraduates

- **Goals of program:**
 - Diversity of program participants
 - Exposure to research projects with faculty
 - Increase interest in graduate programs
- **Statistics: 2004-2010**
 - Student participation
 - 10-12 per year
 - 77 total since 2004
 - Total from underrepresented groups
 - 43 ethnic minorities
 - 14 female
 - Total faculty mentors
 - 27
- **In process of planning for Summer 2011**
 - 10 weeks during the summer



CSE High School Contest

Texting '10

October 2, 2010

- 15 teams registered!
 - 75 students participating
- 1st Place: Center Point High School
 - Center Point, Texas
- Yoonsuck Choe, Coordinator



2009 Contest: Computational Thinking

- 55 students participating
- 14 teams from 14 different schools
- 1st Place: North Crowley High School
 - Fort Worth, Texas



CSE Seminars

- **Freshman Seminar (CSCE 181)**
 - Discuss how CS concepts are used in end products
- **Undergraduate Seminars (CSCE 481)**
 - Discuss career paths
- **Graduate Seminars (CSCE 681)**
 - Research talks
- **Undergraduate Project Courses**
 - Senior Design (CSCE 483)
 - Software Design Studio (CSCE 315)
 - Software Engineering (CSCE 431)



CSE Consortium

▪ **Membership**

- Annual membership is \$75,000 (no overhead)
- Recommend up to three different projects

▪ **Benefits**

- Opportunities to tailor a research project to match your industry's open problems
- Access to early research results and methods by groups of employees at your company
- Access to our top graduate students and faculty

CSE Consortium: Research Areas

Security

- Information Assurance
- Network Security
- System Security

Software

- Compilers
- Programming Languages
- Software Engineering
- Parallel Systems

CSE Consortium: Research Areas

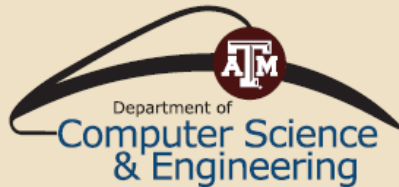
Information

- Multimodal and HCI
- Graphics
- Information Retrieval and Databases

Robotics

- Artificial Intelligence
- Pattern Recognition & Machine Learning
- Intelligent Systems

CSE Capital Campaign



Our goal is to raise **\$1 million by September 2015** in the areas of:

- Lawrence “Pete” Petersen Endowed Scholarship
- Professorships
- Endowed Scholarships
- The CSE Institute
- Computer Science and Engineering Excellence Fund

<u>Pledge Level</u>	<u>Annual Commitment</u>	<u>5 Year Impact</u>	<u>Benefit</u>
Bit	\$512	\$2,560	Your name in the bi-annual eNewsletter and department website
Nibble	\$1,024	\$5,120	All of the Bit level benefits plus a department coffee mug
Byte	\$2,048	\$10,240	All of the Nibble level benefits and a department polo shirt
Word	\$4,096	\$20,480	All of the Byte level benefits plus a book signed by the creator of C++ Dr. Bjarne Stroustrup
Double Word	\$8,192	\$40,960	All of the Word level benefits plus recognition with a plaque



*The Department of Computer Science and Engineering
at Texas A&M University*

IAP Members

Gold	Silver	Bronze
Chevron	ConocoPhillips	Anadarko Petroleum Corporation
Dell, Inc.	Knowledge Based Systems, Inc.	Cisco Systems, Inc.
ExxonMobil	Microsoft	Collective Labs
Hewlett Packard	National Instruments	Cypress Semiconductor
IBM	Raytheon Company	FrogSlayer Software
Lockheed Martin	Tenacity Solutions	GE
Marathon Oil	USAA	Improving Enterprises
Reynolds & Reynolds		Rockwell Collins
Schlumberger		Seismic Micro-Technology, Inc
Valero		