

# DEPARTMENT OF COMPUTER SCIENCE

PhD program: [csphd@gmu.edu](mailto:csphd@gmu.edu)

MS programs: [csgrad@gmu.edu](mailto:csgrad@gmu.edu)

Undergraduate programs: [csug@gmu.edu](mailto:csug@gmu.edu)

General information: [csinfo@gmu.edu](mailto:csinfo@gmu.edu)

Phone: 703-993-1530

Fax: 703-993-1710

Website: [cs.gmu.edu](http://cs.gmu.edu)

The Computer Science discipline is concerned with the design, analysis, implementation, maintenance, and evolution of computer-based systems, and their associated theoretical foundations. Computer science is powering the information revolution of the 21st century, and computer-based systems are used in every scholarly discipline, every sector of industry, and every walk of human life.

Advanced computation tools and techniques are revolutionizing, transforming, and often automating the way we work, play, communicate, collaborate, and conduct business. Computational approaches are integral to a broad array of disciplines including computational natural and social sciences, bioinformatics, health informatics, digital humanities, and financial technology. In addition, the spread of computing throughout society has made the ethical use of computing a central concern to policymakers.

Computer scientists must be well-grounded in the theory of computing and in its application to diverse areas, and they must be able to work closely with members of other professions that use computing. The department therefore offers a broad array of programs in computer science at both the undergraduate and graduate levels. Students who study this discipline can learn about a wide variety of concepts and methods in computer science—algorithms, artificial intelligence, computer networking, cyber security, databases, data mining, data structures, machine learning, operating systems, programming languages, robotics, software engineering—and they will explore effective and ethical applications of these concepts and methods.

## Faculty

### Department Faculty

#### Professors

Ateniese, Aydın, Barbará, Brodsky, S. Chen, Cummings, Domeniconi, Kongmunvattana, Košecká, Luke, Maddox, Marcus, Masri, Pettit (Associate Chair), Rangwala, Rosenblum (Chair), Setia, Shehu, Singh, Snyder (Associate Chair), Tecuci

#### Associate Professors

Abdelmoumin, Allbeck, Avramovic, Baldimtsi, Deng, Durić, Gambhir, Gingold, Gordon, Han, Itani, Kamberi, LaToza, Li, Lin, J. Luo, L. Luo, Monroe-White, Negulescu, Nguyen, Pathak, Reep, Richards, Russell, Soundararajan (Associate Chair), F. Wang, White, C. Yu, Q. Zeng, Zhong

#### Assistant Professors

Anastasopoulos, Andrea, Baume, Dimitriadis, Gonzalez Samúdio, Gopalkrishna, Hrolenok, Johnson-Matthews, Kamranfar, Kornaropoulos, Lam, Liu, Lu, Shamseddine, Stein, Xiao, Yang, S. Yao, Z. Yao, Ye, Yin, F. Yu, Zaman, Zhang, Zhou, Zhu

#### Senior Instructors

Otten

#### Instructors

Destiné, Mughal

#### Affiliated Faculty

Bidkhor, Cheng, Eagle, Hong, Johri, Khasawneh, Lybarger, Marasco, McDonald, Mohebbi, Motti, Pfoser, Shishika, Sun, Uzuner, Wei, Zampieri, K. Zeng

#### Adjunct Professors

Abu Jbara, Aljumaili, Alshammari, Bailey, Curts, Dao, Dean, Dubey, Eggan, Ellis, Ernst, Geldon, Greenwald, He, Hemayati, Hugues, Islam, Katz, Kaznachey, Kowalski, Kurtz, M. Maddox, Mahmood, Moseberry, Nidiffer, Panagoda, Sainju, Seher, Seymer, Soomro, Tkach, Tompkins, Tymann, Wheeler, Wilson, Yuan

#### Emeritus Faculty

DeJong, Gomaa, Hamburger, Kerschberg, Menascé, Motro, Pullen, Rine, Sood, P. Wang, Wechsler

## Programs

- Applied Computer Science, BS
- Computer Science Minor
- Computer Science Undergraduate Certificate
- Computer Science, BS
- Computer Science, MS
- Computer Science, PhD
- Computing Foundations Graduate Certificate
- Information Systems, MS (CS)
- Software Engineering Graduate Certificate
- Software Engineering Minor
- Software Engineering, MS