

# COMPUTER SCIENCE

ALBERT A. HOPEMAN, JR. SCHOOL OF SCIENCE, ENGINEERING AND MATHEMATICS

## **DEPARTMENT FACULTY**

Lory Al Moakar, Ph.D.

Assistant Professor of Computer Science

Brian Dellinger '07, Ph.D. *Assistant Professor of Computer Science* 

Jonathan Hutchins, Ph.D.

Assistant Professor of Computer Science

Britton Wolfe, Ph.D.

Associate Professor of Computer Science

The abilities I have gained through my coursework, coupled with the assistance of the Career Services Office, have enabled me to secure technical internships at two different companies: InterSystems and PPG Industries. In both experiences, I was well prepared to immediately contribute to the team and grow professionally.

- Edward Quigley '13

### **DEPARTMENT DESCRIPTION**

The Department of Computer Science at Grove City College provides students with state-of-the-art facilities, a modern curriculum, the latest computing technologies, exciting research opportunities, and a strong Christian college liberal arts education. The program's graduates attend top-ranked graduate programs; innovate, design, and build systems at high-tech companies; and work in support of Christian missions.

### **MAJORS**

Computer Science

This major is an in-depth study of the theory and practice of computing. In addition to the College core curriculum, students complete 95 credit hours of course requirements.

### **MINORS**

Computer Science

Students complete 18 credit hours of course requirements to minor in computer science. The minor provides experience in programming, theory and technical electives in computer science.

Computer Game Design and Development Students complete 21 credit hours of course requirements and will gain a comprehensive view of the world of game design through courses that explore game development and game critique.

Cybersecurity

Students complete 18 credit hours of course requirements, including courses in Math, Political Science, Psychology and Sociology.

Computer Information Systems

Study of computing combined with a broad exposure to business. Students complete 69 credit hours of course requirements in addition to the College core curriculum.

### Data Science

Students complete 19 credit hours of course requirements, including courses in Business, Mathematics and Psychology.

High-tech Entrepreneurship

Students complete 24 credit hours of course requirements and will gain the technical and entrepreneurial experience they will need to start a company within the high-tech space.

Mobile Development

Students complete 18 hours of course requirements, including courses in design and entrepreneurship.

### **ACCREDITATION**

The computer science program at Grove City College is accredited by the Computing Accreditation Commission of ABET, http://www.abet.org.

### SPECIAL DEPARTMENTAL AREAS OF INTEREST

The department offers research projects in the areas of graphics, big data, data mining and artificial intelligence. It also has a unique game development and design curriculum comprised of three courses where students start with 2D arcade games, then create 3D games, and culminate with multiplayer, networked console games.

# **UNDERGRADUATE RESEARCH OPPORTUNITIES**

There are numerous opportunities for students to conduct research during their time at the College. For example, the department is developing advanced artificial intelligence techniques for use in gaming mobile devices. Students are also measuring and improving the performance of modern big data systems.

### **INTERNSHIPS**

Students regularly obtain summer jobs with large and small companies both in the Pittsburgh area and across the nation, such as PPG Industries, Microsoft and Bentley Systems. In addition, students regularly spend summers doing fully funded research either at Grove City College or at top research universities.

# CAREER AND GRADUATION OPPORTUNITIES

An average of 96% of our graduates find employment or gain admission to a graduate program shortly after graduation. Recent employers of our graduates include Amazon, Microsoft, Lockheed Martin, IBM, Cisco and PPG Industries, in addition to various entrepreneurial companies. Some of our alumni choose to use their technical skills to support missions and churches. Other alumni have entered graduate programs at the University of Michigan, Stanford University, and Clemson University, among others.





**CONTACT** 

Britton Wolfe, Ph.D.
Chair and Associate Professor of Computer Science
724-458-2044 | bdwolfe@gcc.edu | www.gcc.edu/csci
100 Campus Drive, Grove City, Pennsylvania 16127

Grove City College is a highly ranked, nationally recognized private liberal arts and sciences college that equips students to pursue their unique callings through an academically excellent and Christ-centered learning and living experience distinguished by a commitment to affordability and promotion of the Christian worldview, the foundations of a free society and the love of neighbor. Established in 1876, the College is a pioneer in independent private education and accepts no federal funds. It offers students degrees in 60 majors on a picturesque 180-acre campus north of Pittsburgh, Pa. Accredited by the Middle States Commission on Higher Education, Grove City College is routinely ranked as one of the country's top colleges by U.S. News & World Report, The Princeton Review and others based on academic quality and superior outcomes.