# IT & COMPUTER SCIENCE

# What can you do with a PhD in Computer Science?

Computer scientists work as theorists, researchers or inventors. Their jobs are distinguished by the higher level of theoretical expertise and innovation they apply to complex problems and the creation or application of new technology. The areas of computer science research range from complex theory to hardware design to programming-language design. Some researchers work on multidisciplinary projects, such as developing and advancing uses of virtual reality, extending human-computer interaction, or designing robots. They may work on design teams with electrical engineers and other specialists. In general, researchers in academic settings have more flexibility to focus on pure theory, while those working in other organizations usually focus on projects that have the possibility of producing patents and profits. \*

#### **Possible Career Paths:**

Operations Research Analyst Computer Specialist Senior Web Developer Database Manager Computer and Information Systems Manager College or University Professor Director of Research or Project Leader Chief Technology Officer Computer Engineering

\* From the Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2008-09

# What does CWU have to offer?

#### The McNair Scholars Program

Undergraduate degrees and certificates in Computer Science and Information Technology and Administrative Management

CWU Imaging Lab

McCracken Seminar Series

- The opportunity to present scholarly research at CWU's annual SOURCE conference
- The Science Talent Expansion Program (STEP), which focuses on increasing the number of students obtaining STEM (Science, Technology, Engineering, and Mathematics) degrees at CWU and the number of traditionally underrepresented students in STEM under-graduate majors.
- A Science Honors Program
- Internship Experiences

# **Helpful Links:**

Association for Computing Machinery: <u>http://www.acm.org/</u> Association for Information Systems: <u>http://home.aisnet.org/</u>

#### Featured McNair Scholars Alumnus:

## **Richard D. Boyce**

Bachelors in Computer Science, CWU Masters in Biomedical and Health Informatics, UW - Seattle PhD in Biomedical and Health Informatics,

# UW - Seattle

### **Currently:**

Post-doctoral fellow, Biomedical Informatics, University of Pittsburgh

"I was first one in my family to go to college so, even though I wanted to be a scientist, I could not easily see myself pursuing a PhD. The mentorship I received while in the McNair Scholars Program helped expand my horizons. The program also provided support for an undergraduate research project that led to my first publication. These experiences formed a foundation that helped me get into graduate school and be successful while there."