UNION UNIVERSITY
DEPARTMENT *of* COMPUTER SCIENCE

The department offers four plans of study: Computer Science major, Digital Media Studies major, Computer Science minor, and Computer Information Systems minor.

http://www.uu.edu/academics/coas/compscience/

Computer Science Major

Upon completion of the Computer Science major, the student will have an understanding of and an appreciation for the interrelation of the five main areas of study in Computer Science: elements and architecture, programming concepts and languages, algorithms, data structures, and computer theory. The major emphasizes the practical application of basic concepts from each; therefore, the graduate will be able to continue study in Computer Science at the graduate level, or enter the job market.

Digital Media Studies Major

The Digital Media Studies major is an interdisciplinary program joining Art, Communication Arts, and Computer Science. Its purpose is to produce a student aesthetically, theoretically, and technologically trained and capable of excellence in the relatively new area of the design, production, and implementation of digital communications media. Included are such areas as web page design, digital visual and aural communications strategies and theory, interactive media design, media programming, digital presentation techniques, and technological advances in digital communications.

Computer Science Minor

The Computer Science minor is intended for students interested primarily in pursuing a career in computer science or related field immediately upon graduation.

Computer Information Systems Minor

The Computer Information Systems minor will provide the student with a general understanding of analysis, design, and implementation of applications via third- and-fourth-generation programming languages and pre-written packages. This minor is intended for the student expecting to use computers in a job-supportive mode.

Faculty

Stephanie Edge, Associate Professor of Computer Science, teaches Survey of Microcomputing Applications, Computer Science: Introduction and Overview, Programming in Java, and Algorithms and Data Structures. Her areas of interests include: computer hardware, web development, and programming languages.

Dr. Jim Kirk, Associate Professor of Computer Science, teaches Digital Systems, Computer Architecture, Computer Graphics, Video Game Design, and Senior Seminar. His research interests center upon machine learning, particularly distributed artificial intelligence (neural networks) and genetic algorithms.

Dr. Haifei Li, Assistant Professor of Computer

Science, teaches Survey of Microcomputing Applications, Database Management Systems, Computer Ethics, and Programming Languages. His research interests include electronic commerce, automated business negotiation, business process management, web services and enterprise computing.

Cam Tracy, Web Development Agent, teaches Web Building and Site Management, Computer Mediated Communication, and Web Applications. Research interests include database design and web application development.

Dr. G. Jan Wilms, Professor of Computer Science and Chair of the Computer Science Department, teaches mostly upper-level classes including Operating Systems, and Networking. He is currently spearheading the use of Lego Mindstorms in introductory classes. His research interests are networking, operating systems, and digital media for the web.

Selected Graduate Biographies

Barry Britt (2002): Systems Administrator, Innovative Computing Laboratory, Knoxville, TN

Jeremy Cathey (2007): Co-owner of ANWT Consulting, Jackson, TN

Josh Duggin: Director of Information Technology, Dyersburg Community College, Dyersburg, TN

Crystal Gibson (2006): Information Systems Specialist, Housing Authority, Paducah, KY

Ryan Gillespie (2005): Network Engineer, ISG Technology, St. Louis, MO

Ben Goodwin (2007): Perl Programmer, Transformations, Inc.

Daniel Green (2004): Financial Services Analyst, Ingram Book Company, LaVergne, TN

Kendal Hershberger (2007): Software Engineer, Garmin International, Inc., Kansas City, MO
   "My education at Union helped prepare me to immediately jump into the world of software development and be successful at a leading tech company. More importantly, however, my years at Union gave me a clear understanding of how my faith in Christ can be used to bring Him honor and glory both in my life and in my work in the computing world."

Kevin Hieb (2005): Quality assurance, Aprimo, Indianapolis, IN

Dusty Hughes (2003): Information Technology Manager, Carey Counseling Center, Inc.

Dustin Martin (2007): Web Applications Developer, Kroger, Louisville, KY

David Moses (2007): Datatel, Washington, D.C.

Dwayne Pfaff (2001): Kirklands, Jackson, TN

Allen Smith (2004): Mac Development, Wacom Digitizers, Driver Development, WA

Andrew Skaggs (2006): Information Technology Manager, Davidson Titles, Jackson, TN

Philip Smith (2002): Network Technician, Medical Center, Vanderbilt University, Nashville, TN

Milan Zivkovic (2005): Financial Analyst, Spheris, Franklin, TN
   "I was definitely challenged to think analytically, strategically, and creatively. Many practical group projects were very beneficial for me to learn another aspect important in life and that is the `power of synergy' where 1 + 1 > 2."