

Computer Science



UNION UNIVERSITY ACADEMIC UPDATE

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/compscienc/>

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 Repair and Maintenance, and Computer Graphics. 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, and Computer Mediated Communication. 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.

Senior Seminar Presentations

<http://computerscience.uu.edu/seminar/index.htm>

The Computer Science Seminar course provides two important opportunities for students. First, students are involved in directing the topics discussed in the seminar, thus enabling them to tie up loose ends and address perceived deficiencies in their computer science backgrounds. The seminar also involves a major project which immerses students in a real-world problem to which they must apply their skills and creativity.

A project is adopted only if it both addresses a real need and involves skills that students have not already acquired in their coursework at Union. Therefore, seminar students find themselves in the situation of the Computer Science graduate, who must often discover the means to produce results without the sort of supervision and structure given in much under-graduate coursework. There is an emphasis on servanthood in the seminar projects with preference given to those that support Christian ministry and missions.

Recent Student Seminar Presentations

Kevin Jett, Web-Based Radiology.

Kevin McDaniel, Optimizing Delivery Times – A GIS for Papa John's Pizza.

Tasheena Richmond, Web-Based Database for Local Company.

Paul Simer, Computing Belvedere.

Selected Graduate Biographies

Anyango, Phylis, EDI Administrator at The PictSweet Company.

I did learn a lot from Union. With all the professors ready and willing to work with me all the time, I had the best time ever not forgetting that I had a very tight schedule given that I was also an athlete and would miss lots of classes going out for tournaments.

Campbell, Wayne, Pastoral Intern at First Bible Church of Decatur AL.

George, Willie, PC Support Specialist at Union University.

I really enjoyed my years as a student at Union. Without the outstanding education I received from Union University, I wouldn't have been able to snag the amazing job I have.

Gibson, Crystal, Information Systems Specialist at the Housing Authority of Paducah, KY. Manages the network. VoIP phone system, video surveillance system and computer lab.

Gillespie, Ryan, Systems Engineer, isg Technology Inc.

Green, Daniel, attending Union University for an MBA. Also working as a Web and Information Systems Developer for Younger Associates.

Hieb, Kevin, attending Indiana University for an MS in Information Systems.

Skaggs, Andrew, Assistant IT Manager/Applications Developer with Davidson Titles, Inc. Responsibilities include creating and maintaining code for custom applications. The department attempts to leverage the newest technologies while using many open source technologies.

Union is a place to grow spiritually as well as academically. One of my favorite things about Union is the personal interest that the faculty and staff take in each student. While I was there, I felt as though I was more than just a student occupying a seat. Never once did I feel as though one of my professors was unapproachable-- whether my concerns were academic in nature or otherwise. It is apparent that the faculty at Union strives to be not only a corp of instructors but to be friends and mentors as well.

Katie Miller, EDI Administrator, Pictsweet, Bells, TN. Supports EDI trading partners, CRP/VMI product support and implementation, EDI translator support, Customer Service applications, new E-Commerce initiatives, and EDI Communications. Responsible for in-house reports on AS400 - warehouse management system.

The Computer Science department at Union provided me with a great starting point for life after college that has allowed me to succeed both personally and professionally.

Allen Smith, Software Engineer, Electronics for Imaging, Vancouver, WA. Programmer for their Splash product, a Macintosh-based print server and color management system.

My professors gave me the opportunities to pursue open-ended programming projects, with just enough knowledge to make them fun.

Eddie Childers, Web Developer at Morgan Keegan, Memphis, TN. Works with ASP, VB, COM+, and SQL.

My CSC experience was hard work for rewarding results.

Brian Glass, FedEx, Collierville, TN. Works with a team developing applications and architecture for handheld scanners for international couriers. Voluntarily teaches various classes in Java to other employees.

One of the benefits that I received from the Computer Science program at Union is that the professors helped teach me how to continually learn, which is an essential skill in the technology workplace.



DEPARTMENT OF
COMPUTER SCIENCE
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