

In the Department of Computer Science...

at the University of Alaska Fairbanks (UAF), you will find a friendly atmosphere that encourages excellence and fosters intellectual growth. Through small classes and individual attention, you'll find contact with an engaged faculty who maintain vibrant research programs. Students are encouraged to develop through classroom experiences, colloquia, seminars and collaborative projects.

Employers actively seek graduates of our undergraduate and graduate programs in computer science and software engineering. UAF graduates work for companies including Microsoft, IBM, ARCO, and BP Exploration, government agencies including the FBI, CIA and NSA, and national supercomputing centers. Your career truly begins at UAF.

Programs of Study

Our four-year B.S. program in computer science is the only ABET accredited computer science program in the state of Alaska. Your undergraduate experience will culminate with a senior capstone project where you will be part of a team that solves a real-world problem for a client. Previous graduates have developed pathfinder software for



Todd Kelsey of IBM with students in UAF computer lab discussing donated equipment. UAF Photo by Todd Paris

an autonomous vehicle, scheduling software for a local police department, and database software for the Museum of the North. You can also earn both a B.S. and M.S. degree in only five years.

If you already have a B.S., our two-year M.S. and Master of Software Engineering programs require 30 semester hours of course work, a comprehensive exam and completion of a major unifying project. Teaching and research assistantships are available on a competitive basis. The 2005-06 school year (9 months) stipend for entering master's students is \$12,000 and a tuition waiver for up to 10 credit hours. Additional support may be available from research assistantships during the summer.

Computing Facilities

The main department computing laboratory is a collection of Linux and Windows dual-boot computers to support the general computing needs of computer science, mathematics and statistics students. Our state-of-the-art ASSERT lab contains over 20 computers on an isolated network to support computer security education, research and training. The UAF campus has several general-purpose computing labs and is home to the Arctic Region Supercomputing Center. There you will find several supercomputers and a 3D visualization and interactive virtual reality environment that we call the Discovery Lab.

Students in the Advanced Systems Security Education, Research and Training (ASSERT) lab use computer forensics tools to analyze and recover deleted files from a hard drive. The lab is funded by grants from NASA, the National Science Foundation and the UAF Technology Advisory Board. Photo by Kara Nance



Why Fairbanks, Alaska?

We are located in the heart of interior Alaska and offer an ideal place of study for students interested in hiking, skiing, mountain climbing and canoeing. The campus sits within an easy drive of the Alaska Range and Denali National Park. The university maintains an excellent system of cross-country ski trails, and several downhill slopes are just outside town. The predictability of snowfall makes Fairbanks a regular training spot for the US nordic ski team. Scholars with a love of unspoiled wilderness will appreciate the view from campus - a vast panorama of peaks and glaciers. If backpacking, fishing, biking or the beauty of nature excite you, then you should consider attending UAF.

Background circuit board image by Jon Genetti

The Faculty & Their Research

Glenn Chappell - Assistant Professor of Computer Science. Ph.D., University of Illinois, Urbana-Champaign. *Graph theory; combinatorics; computer graphics.*

Stephen Bique - Assistant Professor of Computer Science. Ph.D., University of Joensuu, Finland. *Formal methods; parallel programming.*

Jon Genetti - Associate Professor of Computer Science. Ph.D., Texas A&M University. *Computer forensics; information assurance; computer graphics; planetarium visualization.*

Chris Hartman - Associate Professor of Computer Science. Ph.D., University of Illinois, Urbana-Champaign. *Combinatorics; information assurance; computer graphics; virtual reality.*

Peter Knoke - Associate Professor of Computer Science and Software Engineering. Ph.D., Syracuse University. *Software engineering; computer networks; multimedia systems.*

Orion Lawlor - Assistant Professor of Computer Science. Ph.D., University of Illinois, Urbana-Champaign. *Computer graphics; parallel programming; software craftsmanship, intrusion detection.*

Kara Nance - Professor of Computer Science. Ph.D., University of Oklahoma. *Information assurance; computer security; data systems.*

Mitchell Roth - Professor of Computer Science. Ph.D., University of Illinois, Urbana-Champaign. *Intrusion detection; computer security; systems programming; simulation.*

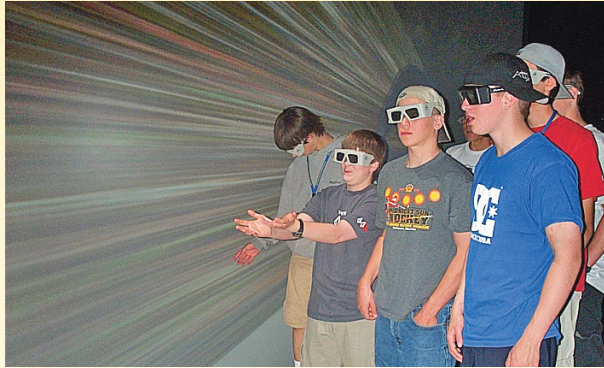
Instructors

Joe Dart - Adjunct Assistant Professor of Computer Science. M.S., University of Alaska. *Resource modelling; simulation.*

Ronald Gatterdam - Adjunct Professor Emeritus of Computer Science and Mathematics. Ph.D., University of California, Irvine. *Cryptography; computer science; computability; complexity.*

Brian Hay - Adjunct Instructor. M.S., University of Alaska Fairbanks. *Computer security; intrusion detection; system administration; data systems.*

Peter Kristeller - Adjunct Instructor. B.S., M.B.A., University of Alaska Fairbanks. *Application development; software engineering of business applications.*



UAF Alaska Summer Research Academy students experience a 3D virtual reality environment. Photo by M. Roth

Department of Computer Science
University of Alaska Fairbanks
PO Box 756670
Fairbanks, AK 99775-6670
Phone: 907-474-2777
Fax: 907-474-5030
Email: fyesci@uaf.edu

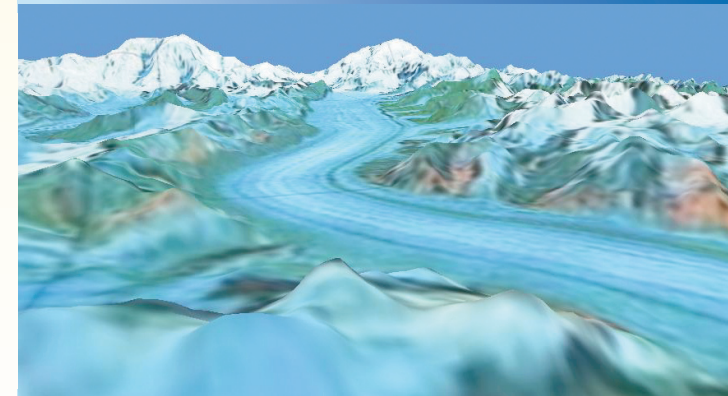
Visit the Computer Science home page:
<http://www.cs.uaf.edu>



The University of Alaska Fairbanks is accredited by the Commission on Colleges and Universities of the Northwest Association of Schools and Colleges. UAF is an affirmative action/equal opportunity employer and educational institution. 04/03

COMPUTER SCIENCE SOFTWARE ENGINEERING

B.S. and M.S. Programs



A view from the south of Denali, created by combining a Landsat satellite photo with USGS elevation data. Image by O. Lawlor



College of Natural Science and Mathematics