On May 11, 2003, we graduated over 150 computer science students including Ph.D.’s, Master’s, first majors, and second majors. Graduates who are heading off to the corporate world are joining some of the best corporations in the country, others are accepting teaching positions at universities or using their skills to launch their own businesses. Approximately 20 percent of our undergraduates have accepted admission to a graduate or professional school. Each graduate leaves the Department of Computer Science at Duke University with the knowledge to achieve their future goals and become a great success.

One of our students, David Arthur, has recently gained national attention by winning the $50,000 grand prize in the 2003 Sun Microsystems and TopCoder Collegiate Challenge. We are also proud of our programming team that reached the world finals in the ACM International Programming Contest, under the instruction of Director of Undergraduate Studies, Owen Astrachan. As always, we are appreciative of the generous gift by Professor Emeritus Tom Gallie which enables our programming team to compete in such events.

Our year has been filled with many triumphs. We had one of our strongest years in grant funding—over $8 million including Industrial Partners Program (IPP), research grants, and contracts. We are pleased to announce the promotions of Alvin Lebeck and Amin Vahdat to Associate Professors with tenure. The Sloan Foundation awarded 16 Fellowships this year to computer scientists and we are proud that two of the recipients are Assistant Professor Ronald Parr and Associate Professor Amin Vahdat. Another of our faculty, Professor John Reif, has been honored with the A. Hollis Edens Chair of Computer Science. We are also delighted with the recent award of the David and Janet Vaughn Brooks Teaching Award to Associate Professor Amin Vahdat. Finally, and this is a big one, Professor Carla Ellis has been named Editor-in-Chief of the ACM Transactions on Computer Systems.

We look forward to many more triumphs in 2003-2004.
Faculty News

John Reif Named A. Holmes Edisen Professor of Computer Science

Duke University is recognizing Professor John Reif with an appointment as the A. Holmes Edisen Professor of Computer Science in Trinity College of Arts and Sciences, effective September 1, 2003. Professor Reif has experienced a distinguished career developing the mathematical underpinnings of many fields in computer science. Recently he has been working in the area of DNA computing research and leads an interdisciplinary group at Duke, which conducts laboratory experiments on the self-assembly of DNA nanostructures. To support this highly innovative research, he has assembled various groups of well-known researchers and coordinated proposals to the Defense Advanced Research Projects Agency and the National Science Foundation, which have funded, in the last five years, three major research grants and contracts each of over $2 million.

Professor Receives Prominent IBM Award

Professor of the Practice Owen Astrachan has been selected to receive an IBM Eclipse Innovation Award for $28,000. This award is highly competitive and recognizes the quality of his proposal and its importance to the industry. In November, IBM announced the Eclipse Innovation Grant competition. Qualified faculty members and researchers were able to submit grant proposals that used the eclipse open source code base for teaching or research, or to actively promote the growth of eclipse user communities. Award recipients were encouraged to prepare a short paper setting out the results of the project, together with overall feedback and suggestions concerning eclipse and its potential use, for presentation at the Eclipse Innovation Workshop in October 2003. Award recipients were also encouraged to share their infrastructure with the eclipse community via the eclipse open source project.

Owen Astrachan Wins “Great Coach Award”

Director of Undergraduate Studies, Owen Astrachan has won the “Great Coach Award” at the ACM International Programming Contest, held in March. This year’s competition drew 70 teams from 26 countries culled from a record 3,850 teams from 68 countries who competed in regional contests worldwide for a spot at the 27th World Finals. During the Contest, students were united through the common language of code as they competed in a race against the clock to solve ten programming problems in one afternoon. The Duke team has advanced to the World Finals 11 out of 15 years, placing as high as third in the world. The 2003 Duke programming team consisted of Ethan Eade, Albert Mao, and Thomas Finley.

Assistent Professor Ronald Pant and Associate Professor Amin Valdah, have been awarded prestigious Sloan Research Fellowships. Sloan Research Fellowships, awarded for two-term years, recognize young scientists who show outstanding promise of making fundamental contributions to new knowledge in the fields of chemistry, physics, mathematics, computer science, economics, and neuroscience. Sloan Research Fellows must have completed their Ph.D. in these fields within six years of their nomination for selection and must be members of the regular faculty of a college or university in the United States or Canada. Sloan Research Fellowships are awarded annually to 112 young scientists of exceptional promise; 26 past Sloan Fellows have become Nobel Laureates.

Carla Ellis to Sit on Board of Directors and Become Editor-in-Chief

Professor Carla Ellis has been elected to the Board of Directors for the Computing Research Association. The Computing Research Association (CRA) is an association of more than 200 North American academic departments of computer science, computer engineering, and related fields; laboratories and centers in industry; government, and academia engaging in basic computing research, and affiliated professional societies. Ellis has also been named Editor-in-Chief of the ACM Transactions on Computer Systems. The purpose of ACM Transactions on Computer Systems is to present research and development results on the design, specification, realization, behavior, and use of computer systems. The term “computer systems” is interpreted broadly and includes systems architectures, operating environments, distributed systems, and computer networks. The journal has been ranked recently by Citeseer as the seventh best among a thousand venues on the dimension of “estimated impact”.

Amin Valdah Receives The David and Janet Vaughn Brooks Teaching Award

Amin Valdah has been awarded the David and Janet Vaughn Brooks Teaching Award for 2002/2003. Valdah is the recipient of one of four Trinity College Distinguished Teaching Awards given each year. The award recognizes faculty members who demonstrate excellence in undergraduate teaching and commitment to enhancing the educational experience of undergraduates and carries a $5,000 stipend. Nominations are made by students and faculty colleagues and recipients are selected on the basis of their ability to encourage intellectual excitement and curiosity in students, knowledge of a field and ability to communicate it, organizational skills, openness to students, and commitment to excellent teaching over time.

Carla Ellis has also been named Editor-in-Chief of the ACM Transactions on Computer Systems. The purpose of ACM Transactions on Computer Systems is to present research and development results on the design, specification, realization, behavior, and use of computer systems. The term “computer systems” is interpreted broadly and includes systems architectures, operating environments, distributed systems, and computer networks. The journal has been ranked recently by Citeseer as the seventh best among a thousand venues on the dimension of “estimated impact”.

Associate Professor Amin Valdah has received The David and Janet Vaughn Brooks Teaching award for 2002/2003. Valdhah is the recipient of one of four Trinity College Distinguished Teaching Awards given each year. The award recognizes faculty members who demonstrate excellence in undergraduate teaching and commitment to enhancing the educational experience of undergraduates and carries a $5,000 stipend. Nominations are made by students and faculty colleagues and recipients are selected on the basis of their ability to encourage intellectual excitement and curiosity in students, knowledge of a field and ability to communicate it, organizational skills, openness to students, and commitment to excellent teaching over time.

Duke Computer Scientists Clan the Internet for Software Testing

Duke University computer scientists Amin Valdah and Jeffrey Chase have developed an improved computer software equivalent of a scale model of the Internet for testing new programs before they “go live” on the real Internet. A team led by Valdah and Chase created ModINet because they needed a better way to test such software as systems to automatically allocate resources such as disk storage and computing power in very large distributed systems. Improving such “resource provisioning” in large networked systems prevents one computer from being overwhelmed while another is almost idle, and one disk from filling up while another is almost empty. However, Valdah said, “An important problem in developing software for distributed resource provisioning is finding a way to test the software as you develop it — to determine whether it can really do what you want it to do.”

According to Chase, “Realistic pre-release testing seems like a prerequisite to making any claims about improving scalability and reliability.”

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James W. O’Neil  
Principal Technical Support Engineer  
Sybase, Inc.  
Proud foster parent of a 31/2 year old boy, adding to their biological family of an 8 year old and 11 year old.

1986  
Robert Shelby Fox  
RD&D Development Manager- Data Warehouse  
ALTELIT, Information Services  
Hired to the new position of R&D Manager.

1983  
RJ Ruggiero  
Vice President- IT  
Warner Music Group  
Recently completed implementation of new $50 million Distribution System (Order-to-Cash systems) as VP/Project Director.

1976  
Steve Tius  
Director, E-Commerce  
AmeriTrack  
Recently hired to position of Director of E-Commerce, responsible for Web site.

2000  
Daniel Gay Fowlkes  
Computer Scientist  
U.S. Military  
Proud new parent of Anastasia Maria.

1999  
Sarah Christopher Hafer  
Technical Support Representative  
Wise Solutions, Inc.  
Moved from California to Michigan for a new job.

1998  
Jason Matthew Finkelstein  
Partner  
Gloom  
Attending Columbia Business School in Fall 2010.

1994  
David Penrock  
Senior Research Scientist  
Overture Services  
Recently promoted to Senior Research Scientist.

1991  
Susan Asgar  
Assistant Professor  
Rose-Hulman Institute of Technology  
Accepted a job at Rose-Hulman Institute of Technology for Fall 2003.

1987  
James W. O’Neil  
Principal Technical Support Engineer  
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Proud foster parent of a 31/2 year old boy, adding to their biological family of an 8 year old and 11 year old.


Be sure to keep in touch by filling out our Alumni Registration form located at www.cs.duke.edu/csppeople/alumni/alumnireg.html. As part of the CS Alumni Directory, you will allow previous classmates to keep track of you, network with alumni from various years, and keep posted on the latest happenings of the CS department. If you have already registered, please be sure to keep your entry up-to-date. Any information you choose to share with us will be kept in strict confidence. We look forward to hearing from you!

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David Kats  
Professor  
Dartmouth College  
Recently promoted to Full Professor.

Scott Christopher Moore  
Senior Product Manager  
Artesia Technologies, Inc.  
Proud new parents of Susanna Isabelle, born March 6, 2003.
Congratulations Graduates!

The age of computing is on us and every measure of growth in the world of science is rising exponentially. Congratulations to all who have completed their studies at Duke and are leaving to become a part of the big story. You will be involved in the most profound period of scientific accomplishment ever. Go forth with our best wishes.

-Dr. Alan Biermann
Graduation with Distinction:

- Marco Till Brenner
  Java Extreme: Sawtooth Game Engine
- Andrew Laurence Chappell
  Online Java Tutorial
- Timothy Rainer Church
  Online Java Tutorial
- Jeremy Donald Morgan
  Animated Computer Science Concepts
- Andrew Christopher Preslar
  Animated Computer Science Concepts

Lipyeow Lim Awarded IBM Graduate Fellowship

CS graduate student Lipyeow Lim, has been awarded an IBM Graduate Fellowship. The IBM Ph.D. Fellowship Program is intended to honor exceptional Ph.D. students in disciplines of mutual interest including: chemistry, computer science, electrical engineering, materials science, mathematics, mechanical engineering and physics, as well as emerging technical fields, such as e-commerce, nanotechnology, and the computational sciences. The IBM Ph.D. Fellowship Program also supports the long-standing commitment to workforce diversity.

Spring Picnic

The department held its annual Spring Picnic on Saturday, April 5, 2003. Faculty, students, and prospective students met at West Point on the Eno to get acquainted with one another and enjoy a great spring day!

Outstanding Undergraduate Teaching Assistant

Jennifer Joy Bedell

Alex Vasilos Memorial Award

Marco Till Brenner

More Awards and Honors

Outstanding Undergraduate Teaching Assistant

Jennifer Joy Bedell

Alex Vasilos Memorial Award

Marco Till Brenner

David Arthur Wins TopCoder Finals

Duke junior David Arthur, a double major in computer science and mathematics, won the $50,000 grand prize in the 2003 Sun Microsystems and TopCoder Collegiate Challenge, an international computer programming contest with more than 1,000 entrants.

After claiming the Collegiate Challenge championship and the $50,000 prize, Arthur said, “I’m extremely happy. TopCoder is still a fairly new competition, but it has already attracted some extremely talented people. To be able to compete with them and then come out on top is truly a great honor.”

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Ethan Eade Wins Goldwater Scholarship

Ethan Eade is one of four students who have won the Barry M. Goldwater Scholarship in Science, Mathematics and Engineering.

The $7,500 scholarship is a merit-based award given to undergraduates planning research careers in mathematics, engineering or the natural sciences. Up to 300 students nationwide win the award each year. Eade, a computer science and mathematics double major from Maryland, aims to earn a doctorate and become a professor of computer science. “I applied because it matches pretty much exactly what my academic interests are,” Eade said, adding that if he does not become a professor, he would like to do computer-oriented research. “I like the academic setting, and I like the idea of exploring for the sake of exploring.”

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Anup Shetty - UTA of the Month for January/February

Anup, UTA for CPS 6, was frequently cited for helping students “in a fashion that goes beyond just eliminating bugs”. He even received mention from students not enrolled in CPS 6 because he consistently made himself available to students in other courses. Anup has been noted by instructors and graduate TAs as being an exemplary worker by completing his grading on time, monitoring discussions well, and holding very popular helper hours.

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