

MULTICAST

THE DEPARTMENT OF COMPUTER SCIENCE AT THE UNIVERSITY OF ROCHESTER



LOOK HOW WE HAVE GROWN!

Meet Our Newest Graduates on Page 23



HAJIM
SCHOOL OF ENGINEERING
& APPLIED SCIENCES
UNIVERSITY of ROCHESTER

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'Changes in Latitude, Changes in Attitude'



In May 1996, URCS awarded its first bachelor's degrees: 10 in all, 5 BAs and 5 BSs. The lucky graduates had started their computer studies in the math department, but thanks to the then brand-new undergraduate program, they received their degrees in the CS department. In May 2018, that number had grown to 102.

The intervening years have witnessed major changes in URCS. What was a small arts and sciences department of about 10 faculty, awarding only PhD degrees, has grown to a full-fledged engineering department with over 20 core faculty lines—and the largest undergraduate and master's enrollments in the Hajim School.

There have been ups and downs in the undergraduate program along the way. Our first three classes, representing students already studying CS through the applied math program, were about the same size as the first one. We then experienced sudden growth with the new CS degree program, and in 2003, 50 bachelor's-degree candidates graduated—five times the original class size.

Back in 2000, however, the “dot-com bubble” had burst, followed by the “Great Recession” of 2007. Freshman enrollment declined, and four years after the crash, our graduating class had dropped to below 30. With the economic recovery beginning around 2010, enrollments increased, and the class of 2014 was finally back up to the pre-crash level of 50. Since then, enrollments have exploded, and our graduating class exceeded 100 this year. Next year's class promises to be even larger.

Through 22 years and 5 chairs, the undergraduate CS program has had one constant, stabilizing presence: Marty Guenther, our undergraduate coordinator. Marty had been working for the department part time since 1992 and became the full-time coordinator with the start of the UG degree program. She has served as advisor, confidant, and CS den mother to virtually every CS major since the beginning of the program. She knew them all by name. When one of the faculty ran into an issue with one of their advisees, Marty was always the first stop. And, it was nearly always true that she already knew about the issue and had a good idea of how to fix it.

The year 2018 saw Marty's retirement. Combined with the move 100 meters north to Wegmans Hall and the explosive program growth, it seems like the start of a new era. We now have a mature and vibrant program, but with more than 500 undergraduates, it is one that has grown too large for one person to embrace. Luckily, Marty has prepared us well by shaping the culture of the undergraduate program into an inclusive and encouraging family. After shepherding hundreds of undergraduates through the program, Marty's contributions to our department can only be adequately described in the words of the students themselves.

Seema Plaisier '04

“When I started at URCS 17 years ago, she was comforting and helpful. Marty did the little important stuff, like getting transcripts and handing out the key cards for logging into the network. I looked forward to chatting with her as she took care of things for me. Marty got the answers to my questions—some that I didn't realize I had yet. Marty watched over me, over all of us; made sure that even though I was struggling through the classes, that I didn't fall too far behind. So much so, that I graduated with honors. Marty stepped up when we needed her; she was the one who came to class to tell us when 9/11 happened. Marty has kept up with me and so many other alumni that have gone on to do all kinds of things all over the world, and, in the process, she gave me advice when I really needed it. Marty has been the smile and the heart of the department. I will be forever grateful for her guidance and love. I know that whatever she does in the next chapter of her life, she will continue to make a huge difference in the lives of everyone she meets.”

Nazmin Kharodia '14

“I wouldn't have been a computer science major if it wasn't for Marty.”

Veneet Sawhney '03

“How were you always there, at any moment of any day, to answer our questions?”

“Someone needs to solve this puzzle.”

Bram Adams '16

“Marty is not only the lifeblood of the CS department, she's a phenomenal friend and mentor as well. She is visibly passionate about making each and every student feel unique and, most importantly, welcomed into the CS family. I met Marty my first day of freshman year and she remained a mainstay throughout my college career. Be it her delicious cookies, or the fact that her door was ALWAYS open, I always felt I had a home in the department. There were many times during my time at Rochester that I thought I wouldn't be able to graduate, and, so many times, I felt like I was inadequate in my courses. Each time, Marty proved herself a dear friend by consoling me and helping me gain the confidence to graduate with a BS! The saddest part about Marty's retirement is that the students of the future won't know how much of a pleasure it was to have her as their guardian angel.”

Kunal Mukherjee '03

“My statement will probably be repeated by most CS majors, but I would not have graduated without Marty. She not only provided encouragement during really difficult times but was almost like a guardian to me and two of my closest friends (jointly referred to as the 3 Musketeers by Marty).”

Darcey Riley '12

“I never would have graduated if not for Marty! I dropped a linguistics major at the last minute and completely forgot this meant my social sciences cluster wouldn't be satisfied. Marty noticed and made sure I got the paperwork filled out for a linguistics minor so I could graduate on time. Thank you so much, Marty, for this and everything!”

Nawrose Nur '03

“When I was ready to quit, Marty reached out and showed the path forward. She knew us better than we knew ourselves at times.”

And finally, from Joshua Pincus '99

“A long time ago in a freshly minted degree program far, far away, you were the warm, friendly, and reassuring voice whose sage counsel soothed many a scared and confused undergrad. ‘So what reqs do we need from math? I studied Pascal in high school. Can't I skip CSC 171? Do any of the CS courses actually have textbooks? Can we sleep in the undergrad lab?’ For all questions academic or pedantic, there was ONE person to whom we could turn. And turn we did. On behalf of all the kids we once were, thank you! On behalf of this kid, I have something more to add. My dad passed away during my senior year, just before my Take 5 year. That year and the subsequent year were difficult. My head was not in the right place. Things happened behind the scenes to make my life and the life I've lived after graduation better. You never said anything, but you most definitely did things. I've had and continue to have a successful and enriching career in no small part due to those silent efforts. I will be forever grateful.”

To a remarkable tenure must be added Marty's support of women in computer science. That first class in 1996 had no women. Zero. During the height of the bust from 2005 to 2010, an average of one woman per year graduated from our program. We clearly had a gender gap. Marty spearheaded a years-long initiative to encourage and support UG women's participation in URCS. This effort included the creation of UR Women In Computing (URWIC) (www.csug.rochester.edu/URWIC/home.php) as a subcommittee under the Computer Science Undergraduate Council, yearly trips with our undergraduate women to the national Grace Hopper Celebration of Women in Computing (<https://ghc.anitab.org>), and participation in the multiuniversity BRAID (Building, Recruiting, And Inclusion for Diversity) initiative (<https://anitab.org/braid-building-recruiting-and-inclusion-for-diversity/>). These efforts have paid off. Since 2016, the graduating class has contained approximately 30 percent women, nearly double the national average.

So there you have it. The undergraduate CS program at Rochester has completed a 20+ year transition from small beginnings to a thriving enterprise preparing the next generation for careers in the information economy. The faces are changing, but the legacy of those who shepherded the program through its childhood and adolescence is alive and well. To paraphrase a lyric, the future is wide open. *Meliora.*