



An Interview with CCS Dean Narain Gehani

Professor Narain Gehani was named dean of NJIT's College of Computing Sciences (CCS) in 2006, previously serving as chair of the Department of Computer Science. Prior to joining NJIT, he taught at the State University of New York in Buffalo and worked for Bell Labs-Lucent Technologies. At Bell Labs, he was engaged in numerous leading-edge projects, such as making it possible for workers to access their office computers from remote locations. He is the founding director of the NJIT Science and Technology Enrichment Program (STEP), a highly selective program for high school students interested in science and technology. An expert in Web technologies, software and databases, Gehani has bachelor's degrees in mechanical engineering from Stevens Institute of Technology and the Indian Institute of Technology, and MS and PhD degrees in computer science from Cornell University.

NJIT Magazine: What are your goals for CCS, say, over the next five years?

Gehani: We must ensure that CCS attracts the best students from across the U.S. and from other countries by offering top-notch courses that cover all aspects of the latest computing technologies.

NJIT Magazine: What are the biggest challenges facing administrators and faculty at CCS today?

Gehani: A major challenge is the rapid evolution of computing technology, which changes so quickly that

individuals and institutions have a difficult time keeping pace. I know that change is the norm in all sciences. But the rate of change in computing is exceptional. That leads to the challenge of making sure that our faculty keeps abreast of new technologies so as to offer the latest knowledge in computing to our students.

NJIT Magazine: What are some factors that have influenced the job market for students in computer science and related fields in recent years?

Gehani: After the Internet bubble burst, computing departments at NJIT and other schools had decreases in enrollment, a trend also exacerbated by all the publicity about the outsourcing of jobs in computing to other countries. This has led to U.S. schools graduating fewer students in computing, which has helped to make the fear of outsourcing a self-fulfilling prophecy. It's true that some low-end jobs were outsourced for economic motives. But U.S. companies are now going overseas in search of skilled computing professionals because we don't have enough people in this country with the necessary education. To reiterate, while cost is certainly a factor for companies in the global economy, they still want the best talent.

NJIT Magazine: So what would you say about the issue of outsourcing and offshoring to a young person in the U.S. who is considering a degree in information technology?

Gehani: Work hard to acquire the necessary education and skills, and jobs will be there. A few decades ago, having a high school diploma guaranteed one a good job. Then the requirement became a bachelor's degree. Now, quite frankly, you need education beyond the bachelor's in many fields, and not only in science and technology. This is what makes one competitive in the job market today.

NJIT Magazine: Then what would be the best educational path for a student entering CCS?

Gehani: Master computing concepts and fundamentals as quickly as you can, and work on real projects as soon as possible. As an undergraduate, internships and co-ops are very important in this respect. Then consider a graduate degree, perhaps after a few years of additional real-world experience. Someone with an undergraduate degree in computing might consider an MS in computing or perhaps an MBA. The important thing is to acquire additional knowledge that makes you attractive to employers. That's why graduate school has become so important.

NJIT Magazine: Why should a student choose NJIT's College of Computing Sciences over similar schools at other universities?

Gehani: One very important reason is that we focus on applied computing much more than on theoretical computing. This is what the marketplace demands. We also offer students an extensive range of opportunities for gaining real-world experience through our relationships with companies in many industries. As I mentioned, internships and co-ops combined with the

necessary education are important paths to good jobs.

In addition, we're continuing to focus on the creation of an educational environment that promotes closer interaction among instructors and students. For example, we've created a new, inviting space in our Guttenberg Information Technologies Center just for CCS students, to foster more relaxed social interaction.

NJIT Magazine: What do you consider to be an especially leading-edge CCS program?

Gehani: Although it's difficult to choose, I think you could say it's our BS in bioinformatics, which is a very new program. Bill Gates says that the marriage of computing with biology has extremely significant implications for science in the 21st century, and that marriage is at the heart of NJIT's leading-edge bioinformatics program.

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NJIT Magazine: What do you think will be the most exciting development in information technology in the near future?

Gehani: I wish I knew. It's so hard to make such predictions. I've already mentioned that computing is moving at such a rapid rate that you really don't know what the next "big thing" will be. Then there's the issue of what's most exciting from a research perspective as opposed to a commercial perspective.

But I do know that computing is going to be even more vital than it is today. Computers are everywhere — in cars, cell phones, kitchen appliances. Without a doubt, there's going to be increasing demand for people with expertise in all aspects of computing. The 21st century will also demand a high level of computing literacy in virtually every profession — finance, law, medicine, you name it. Even if you're not directly involved with computing science as a profession, your career potential will be very, very limited if you are not adept at using the tools that computing now provides in so many fields. ■

Interviewer: Christina Crovetto is assistant editor of *NJIT Magazine* and editor of the university's online *Newsroom*.
CCS on the Web: <http://ccs.njit.edu>