Georgia Tech’s Online MOOC-based Master Program

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Abstract

In May 2013, Georgia Tech together with its partners, Udacity and AT&T, announced a new online masters degree in computer science delivered through the platform popularized by massively open online courses (MOOCs). This new online MS CS or OMS CS, for short costs less than $7,000 total, compared to a price tag of $40,000 for an MS CS at comparable public universities and upwards of $70,000 at private universities.

The first-of-its-kind program was launched in January 2014 and has sparked a worldwide conversation about higher education in the 21st century. President Barack Obama has praised OMS CS by name twice, and nearly 1,000 stories about the program have appeared in the media. It’s been described as a potential ”game changer” and ”the first real step in the transformation of higher education in the US. Harvard University researchers concluded that OMS CS is the first rigorous evidence showing an online degree program can increase educational attainment and predicted that OMS CS will singlehandedly raise the number of annual MS CS graduates in the United States by at least 7 percent.

To ensure program quality and rigor, Georgia Tech started in 2014 with small enrollment of about 400; in January 2017, enrollment is expected to exceed 4,500 students. So far 277 students have graduated from OMS CS, and another 300 have registered to graduate in Spring 2017. The program also has also paved the way for a number of similar, MOOC-based M.S. programs.

The talk will describe the OMS CS program, how it came about, its first three years, and what Georgia Tech has learned from the OMS CS experience. We will also discuss its potential effect on higher education.

Bio

Dr. Zvi Galil, Dean of the College of Computing, Georgia Institute of Technology, was born in Tel-Aviv, Israel. He earned BS and MS degrees in Applied Mathematics from Tel Aviv University, both summa cum laude. He
then obtained a PhD in Computer Science from Cornell University. After a post-doctorate in IBM’s Thomas J. Watson research center, he returned to Israel and joined the faculty of Tel-Aviv University. He served as the chair of the Computer Science department in 1979-1982.

In 1982 he joined the faculty of Columbia University. He served as the chair of the Computer Science Department in 1989-1994 and as dean of The Fu Foundation School of Engineering & Applied Science in 1995-2007. Galil was appointed Julian Clarence Levi Professor of Mathematical Methods and Computer Science in 1987, and Morris and Alma A. Schapiro Dean of Engineering in 1995. In 2007 Galil returned to Tel Aviv University and served as president. In 2009 he resigned as president and returned to the faculty as a professor of Computer Science. In July 2010 he became The John P. Imlay, Jr. Dean of Computing at Georgia Tech.

Dr. Galil’s research areas have been the design and analysis of algorithms, complexity, cryptography and experimental design. In 1983-1987 he served as chairman of ACM SIGACT, the Special Interest Group of Algorithms and Computation Theory. He has written over 200 scientific papers, edited 5 books, and has given more than 200 lectures in 20 countries. Galil has served as editor in chief of two journals and as the chief computer science adviser in the United States to the Oxford University Press. He is a fellow of the ACM and the American Academy of Arts and Sciences and a member of the National Academy of Engineering. In 2008 Columbia University established the Zvi Galil Award for Improvement in Engineering Student Life. In 2009 the Columbia Society of Graduates awarded him the Great Teacher Award. In 2012 the University of Waterloo awarded him an honorary doctorate in mathematics. Zvi Galil is married to Dr. Bella S. Galil, a marine biologist. They have one son, Yair, a corporate lawyer in New York.