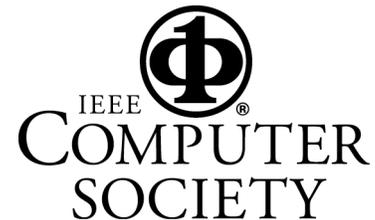


PRINCETON ACM / IEEE-CS CHAPTERS
DECEMBER 2015 JOINT MEETING

Computer Science for the Masses



The following “computer science in education” talk is part of our celebration of Computer Science Education Week (December 7-13, <http://csedweek.org>).

Colleges and universities need a good “introduction to computer science” for their students. What should we teach and how should we teach it? How should we use technology in an introductory course?

Computer science enrollments are skyrocketing, and the need for a first course in computer science has never been more acute. Every college student needs not just to know how to program, but to be able to engage effectively with computation at many levels. This talk describes a computer science course, 25 years in development, that can take its place alongside the standard first courses in physics, economics, biology, and other disciplines in any college or college-prep curriculum. It is the highest-enrolled course at Princeton, attracting two-thirds of all students, preparing them all for further study in computer science (nearly 40% of all Princeton students are taking a CS course at any point in time). The content is broad and deep, building on a solid foundation in programming to address fundamental issues in theoretical computer science and to also provide an overview of computer architecture, all in the context of interesting applications in science, engineering, and commerce. With modern technology, the course can be broadly adopted, using a proven model based on in-depth coverage in a new textbook, extensive online content, and studio-produced lecture videos.

Robert Sedgewick is the founding chair and the William O. Baker Professor in the Department of Computer Science at Princeton and a member of the board of directors of Adobe Systems.

Prof. Sedgewick’s research interests revolve around algorithm design, including mathematical techniques for the analysis of algorithms. He has published widely in these areas and is the author of seventeen books, including a well-known series of textbooks on algorithms that have been best-sellers for decades. Besides *Algorithms, Fourth Edition* (with K. Wayne), his other recently published books are *An Introduction to Programming in Java: An Interdisciplinary Approach* (with K. Wayne) and *Analytic Combinatorics* (with P. Flajolet). With Kevin Wayne, he is currently actively engaged in developing web content and producing online courses that have reached over one million people.

Date:	Thursday, December 10, 2015, 8:00 pm. (Refreshments and networking at 7:30 pm.)
Place:	Updated location: Friend Center Auditorium, Room 101 Princeton University, Olden & William Streets
Information:	Dennis Mancl (908) 285-1066
On-line info:	http://PrincetonACM.acm.org

All Princeton ACM / IEEE-CS meetings are open to the public. Students and their parents are welcome. There is no admission charge, and refreshments are served.

A pre-meeting dinner is held at 6:00 p.m. at Ruby Tuesday's Restaurant on Route 1. Please send email to **princetonacm@acm.org** in advance if you plan to attend the dinner.