



ENIAC Then and Now

On February 15, 1946, the ENIAC was dedicated. Although this machine differed significantly from the computers that followed, this WWII-era creation was the testbed on which the human race learned how to build and program computers. It became a national resource, contributing to a wide variety of research and development until it was decommissioned in 1955. In its original form, the machine was programmed by rewiring it for each new problem. Later it was reconfigured to operate as an instruction set processor with programs dialed into panels of rotary switches. In this presentation, we will discuss how the ENIAC worked and how it was used in both modes of operation. We will look at a number of details of the internal operation of the ENIAC. These details will be illustrated through demonstrations of the ENIAC in the form of a recently developed pulse-level simulator. The presentation will also include some discussion of the simulator implementation.

Dr. Brian Stuart is an Associate Teaching Professor of Computer Science at Drexel University. Over a varied career, he has held industrial positions in areas including data storage, telecommunications, and logistics, as well as consulting in areas ranging from agriculture to medicine. In addition to Drexel, he has taught at Rhodes College and the University of Memphis. His interest in the history of computing was sparked by stumbling across the manual of operation for the Harvard Mark I while an undergraduate. That interest continues today with a small collection of computing artifacts he maintains, restores, and enhances in his basement. He holds degrees from the Rose-Hulman Institute of Technology, the University of Notre Dame, and Purdue University and has published a textbook on operating systems.

Date: Thursday, February 16, 2017, 8:00 pm.
(Refreshments and networking at 7:30 pm.)
Place: Small Auditorium, Room CS 105
Computer Science Building, Princeton University
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@gmail.com in advance if you plan to attend the dinner.

