

THE DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE, CS DIVISION

Presents the Spring 2013 EECS Seminar Series

Dr. David AckleyUniversity of New Mexico

"Robust-First Computing: Beyond Correctness and Efficiency" Friday, February 15, 2013 • 1:00 p.m. • HEC 101

ABSTRACT

Efficiency and robustness are inherently opposed on the value of redundancy, which robustness requires but efficiency eliminates. This talk argues that, by emphasizing efficiency alone, computer science is often optimizing the wrong thing, and we could and should do better, by recognizing and managing the tradeoff explicitly. An illustration of efficiency's costs is presented, along with discussion of possible computing mechanisms when robustness is emphasized even over correctness.

BIOGRAPHY

David H. Ackley is an associate professor of Computer Science at the University of New Mexico, with degrees from Tufts and Carnegie Mellon.

Over twenty-five years his research contributions have involved neural networks and machine learning, evolutionary algorithms and artificial life, and biological approaches to computer security and computer architecture. URL: http://www.cs.unm.edu/~ackley