

CALIFORNIA STATE UNIVERSITY, LONG BEACH

THE MATHEMATICS COLLOQUIUM

presents

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speaking on

A Brief Survey of Genetic Algorithms

Friday, February 16, 2007

12:00PM-1:00PM

FO3-200A

Abstract: Since antiquity, mathematics has been used to model and better understand biological processes. Evolutionary computation is a field of artificial intelligence that has turned this around: Natural biological processes, centered around Darwin's "survival of the fittest" theory are used to motivate and develop algorithms for finding solutions to difficult mathematical problems. When used in tandem with the ever powerful computing resources that continue to be available, evolutionary computation has proved to be a powerful tool that is poised to play a role of continued importance in the many scientific fields. This talk will focus on the mechanics, implementation, and applications of genetic algorithms, which are prototypes for evolutionary algorithms.