

MIND, TECHNOLOGY, AND SOCIETY

Seminar Series

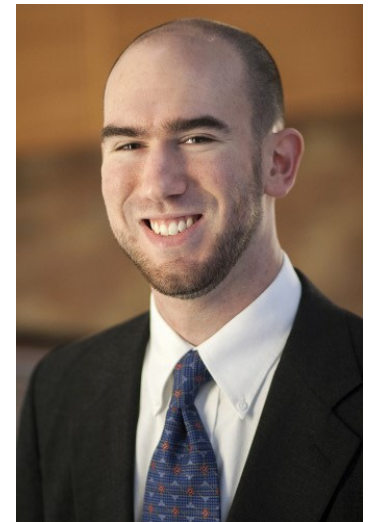
UC MERCED, Fall 2016

Seth Cooper

Northeastern University
Solving Biomolecular Puzzles with Video Games

Understanding and engineering biomolecules such as proteins and nucleic acids has potential for impact in health and medicine. As many of the related problems are structural in nature, crowdsourcing solutions from participants, even those without a background in biochemistry, has shown to be a promising approach. Foldit and Nanocrafter are two freely available online scientific discovery games that have engaged many thousands of players in participating in biochemistry research over the past years. This talk will cover recent, ongoing, and future work in these games, including a competition between players and expert crystallographers, novel tools and interfaces for protein and small molecule manipulation, and player-designed DNA nanotechnology devices.

Seth Cooper is an Assistant Professor in the College of Computer and Information Science at Northeastern University and a member of the Playable Innovative Technologies Lab. He earned his PhD in Computer Science and Engineering at the University of Washington, and is interested in using video games to solve difficult real world problems. He is the chief architect and lead designer of Foldit, a video game that has allowed hundreds of thousands of players to contribute to biochemical scientific research. He is currently working on games with applications in a variety of fields, from nanotechnology to software verification. He has also developed game technologies for real-time crowd simulation and character control.



MONDAY,

November 28, 2016

3:00 PM - 4:30 PM

COB 114

Please contact Jeff Yoshimi (jjoshimi@ucmerced.edu) for more information.