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Education

Stanford University

Palo Alto, CA

PhD student, Computer Science September 2013 - present

California Institute of Technology

B.S., Computer Science (3.8 GPA) September 2007 - June 2013

Work Experience

• Stanford InfoLab Research Assistant. Fall 2013

- Looking for algorithms to generate random graphs with specific properties.

 SKIES Intern, Summer 2013

- Built image search for a collaborative education app.

• Protabit LLC Intern, Summer 2012

- Used Python and Perl to analyze the efficacy of protein design software.

• MIT Department of Brain and Cognitive Sciences

Intern, Summer 2010

Pasadena, CA

- Ran computer-based experiments to explore how people learn new words.
- Used Python to build the experiment website and interface it with Amazon Mechanical Turk.
- Caltech Department of Biology

Intern, Summer 2006

- Used C to stochastically model how fast selfish genes spread into a population.
- The model led to three publications and changed the research focus of the lab.

Projects

• Netflix challenge Fall 2012

- Predicted movie ratings from training data. Ranked 14th in class competition.

• Scrabble Summer 2011

- Wrote a curses-based Scrabble clone in Python.

Publications

• 6 journal articles: three in biology, two in mathematical psychology, one in mathematical physics. One paper published in Science. 2 presentations, both in mathematical psychology. Research featured in Scientific American, New Scientist, Smithsonian Magazine.

Skills

- Computer skills: Python, Unix, C++, Java, MATLAB
- Classes: Algorithms, systems, machine learning, databases, complexity theory, computability theory, real analysis, abstract algebra, stochastic processes, combinatorics, dynamical systems, quantum mechanics

Awards

- Lingle Scholarship (2007, awarded to top two freshmen in incoming class)
- Axline Scholarship (2007, full ride merit scholarship)