

# Alex Rasmussen

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## EDUCATION

### **University of California Berkeley (May 18, 2007)**

B.S. in Electrical Engineering and Computer Science with High Honors

Cumulative GPA: 3.849

Regents' and Chancellor's Scholar

Selected Courses: Algorithms, Communications Networks, Database Systems, Operating Systems, Distributed Systems

### **University of California San Diego (September 2007 - Present)**

Ph.D. Candidate in Computer Science and Engineering

Advisor: Amin Vahdat

## RESEARCH INTERESTS

Distributed systems, peer-to-peer systems, database systems, autonomic computing, computer networks, operating systems

## EXPERIENCE

### **Graduate Researcher, UC San Diego CSE Systems and Networks Group (8/2007-Present)**

- ONet - Designing the API for the next-generation Internet (Current)

### **Engineering Intern - Deep Web Indexing, Google (5/2007-8/2007)**

- Developed a dashboard for Google's deep web indexing system.
- Analyzed indexing statistics to identify major weaknesses in existing system.

### **Student Researcher - UC Berkeley Undergraduate Parallelism Group (1/2007-5/2007)**

- Participated in development of an interface between the STk Scheme interpreter and Hadoop, an open-source implementation of MapReduce.
- Developed a MapReduce-based project for Berkeley's introductory data structures course.

### **Teaching Assistant - Introduction to Database Systems, UC Berkeley (8/2006-12/2006)**

- Taught one discussion section of approximately thirty students each week.
- Planned, designed and graded programming project based on B+-tree prefix-key compression in PostgreSQL.

### **Engineering Intern - AdWords Frontend Billing, Google (5/2006-8/2006)**

- Migrated budget handlers operating on multiple frontends to more modern WebWork MVC framework.
- Implemented interceptors for authentication and parameter injection.
- Augmented testing infrastructure for budget handling with mock budget object creation facility.
- Participated in the AdWords Frontend release cycle as well as construction and maintenance of documentation.

### **Research Assistant, P2 Declarative Networking Project (<http://p2.cs.berkeley.edu/>) (1/2006-5/2007)**

- Ported internal time representation to use Boost, a powerful, open-source set of C++ libraries.
- Implemented a wrapper for the C++ STL list type for use in PEL. P2's internal expression language.
- Added a basic type for duplicate-insensitive frequency distribution sketches to PEL.

## SKILLS

**Programming Languages:** Java, C, C++, PHP, HTML, SQL, Python

**Applications/Systems:** MySQL, PostgreSQL, WebWork, Hadoop