

John Alfred Nathanael Chee

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INTERESTS

Understanding abstractions, applying them in practice. Writing simple code. Writing robust code.

PROFESSIONAL EXPERIENCE

San Mateo Community College District (Redwood City, California)

Student, August 2017 – May 2019

- ▶ I pursued life sciences to build a competitive medical school application.
- ▶ Biology courses: Principles of Biology, Biology of organisms, Cell & molecular biology, Biochemistry (at UC Berkeley extension)
- ▶ Chemistry courses: General chemistry, Organic chemistry

Snowflake Computing (San Mateo, California)

Software Engineer Automation & Tools, April 2016 – August 2017

- ▶ Working with the Automation & Tools team at Snowflake I initiated adoption of reproducible, versionable, reviewable Jenkins job descriptions with the jobs dsl plugin.
- ▶ I secured & isolated Jenkins using its off the shelf LDAP security integration and an in-house Vault-inspired authentication tool.
- ▶ I managed & advised OSS teams transitioning from internal source & build tools to Github & Travis CI.

Twitter (San Francisco, California)

Software Engineer, January 2013 – March 2016

- ▶ As a Software Engineer on the developer productivity team at Twitter I contributed to Pants Twitter's monolithic build system.
- ▶ As a member of the platform intelligence team I contributed to TSAR the Time Series Aggregator. During my time on Platform Intelligence I also took the opportunity to contribute to the Algebird project TSAR relied upon for its probabilistic data structures.
- ▶ On the chargeback team at Twitter I co-architected a datawarehouse to store facts related to usage and user and project identification. Additionally, I built a simple data gathering system that extracted raw chargeback-related data from a diverse population of systems.

MyLife (Mountain View, California)

Software Engineer, May 2010 – January 2013

- ▶ As a Software Engineer, I accepted the task of development, automation and deployment of our search service to our front end team. This involved developing expertise with Hadoop, Lucene and an internal MapReduce flow control tool. I developed a scalable Hadoop-based geocoding solution for our document corpus. I advocated for the use of open standards (HTTP, JSON and Thrift) and modern source control (Git).
- ▶ As MyLife's current and future needs became apparent, I developed a low latency, highly available and scalable search solution based on Cassandra and Solr. MyLife's new search platform removed the need for deployment of Lucene indexes, which effectively eliminated high-latency delivery of our search service. The search service was always up to date within the past 10 minutes. The new search service was an HTTP based service-oriented-architecture written primarily in Python using capistrano for deployment and Supervisor for administration.
- ▶ I developed a scalable geocoding system using MapReduce and an in memory cash to vastly improve performance and minimize network calls.

Prospectus Group (Portland, Oregon)

Systems Administrator, March 2006 – August 2006

- ▶ As a systems administrator, I installed and configured a small secure network of 5 Linux servers. I also managed our production website with a perl-based Content Management System.

Pacific Benefits Group

Information Technology Intern, November 2005 – March 2006

- ▶ As an information technology intern, I built, installed, and configured 50 workstations. Additionally, I managed specialized insurance data mining tools.

RESEARCH

Portland State University, Department of Computer Science (Portland, Oregon)

Research Assistant: Project 10-9, January 2007 – August 2009

- ▶ As a research assistant on Project 10-9, an Open Voice Bridge, I worked on a team to integrate CMUSphinx with an existing MS Access query tool. 10-9 is primarily developed using Java and Subversion.
- ▶ Demonstrated Project 10-9 to focus groups and integrated feedback into future versions.

Portland State University, Department of Civil Engineering (Portland, Oregon)

Graduate Research Assistant: ITS Lab, January 2008 – August 2009

- ▶ As a graduate research assistant, I classified and discovered data gaps, automated daily discovery of erroneous readings, and began work on a time dependent view of overall transit system health. I primarily used PHP, SQL, and Haskell to discover and present the information.
- ▶ Co-authored and presented Transit Performance Measurement and Arterial Travel Time Estimation Using Archived AVL Data
- ▶ Managed several database tables with millions of records

Portland State University, Department of Computer Science (Portland, Oregon)

Computer Science Tutor, April 2006 – December 2006

- ▶ As a computer science tutor, I helped undergraduate students with primary courses including: compilers, data structures, and computational structures. Most questions were about representing data structures in C++ and functional programming in Standard ML.

Portland State University, Department of Civil Engineering (Portland, Oregon)

Undergraduate Research Assistant: ITS Lab, November 2006 – December 2008

- ▶ As an undergraduate research assistant on the Portland Oregon Regional Transportation Archive Listing (PORTAL) project, I created a web application using AJAX, PostgreSQL, PHP that displayed archived public transit system data on a Google map. I also helped process, aggregate, and query traffic data using Python.

EDUCATION

Portland State University, Portland, Oregon

M.S. in Computer Science; Advisor: Bart Massey, GPA: 3.78, June 2009

Portland State University, Portland, Oregon

B.S. in Computer Science; Minor: Mathematics, *Cum Laude*, March 2008

Portland Community College, Portland, Oregon

A.S., June 2004

PUBLISHED PROCEEDINGS

Berkow, M., Chee, J., Bertini, R.L., and Monsere, C., "Transit Performance Measurement and Arterial Travel Time Estimation Using Archived AVL Data," Compendium of Technical Papers, Institute of Transportation Engineers, District 6 Annual Meeting, Portland, Oregon, July 15 – 18, 2007.

PROFESSIONAL ACTIVITIES

Professional Memberships

Association for Computing Machinery, 2006 – 2008

Conferences & Gatherings Attended

BayHac, Bay Area Haskell Hackathon, 2011 – 2014
Haskell Hackers at the Hacker Dojo, 2012 – 2014
International Conference on Functional Programming, 2013
Bay Area Haskell Users Group, 2011 – 2012
Commercial Users of Functional Programming, 2010

AWARDS

President's List, Portland State University, Winter 2007 – Summer 2007
Dean's List, Portland State University, Spring 2006 – Fall 2006

SERVICE

Professional Service

Secretary, Pre-med/Biomedical Research Club, Cañada College, January 2018 – May 2018
Treasurer, ACM Student Chapter, Portland State University, April 2006 – March 2008

Community Service

Patient Advocate, RealOptions Obria Medical Clinics, February 2019 – September 2021
Awana T&T Director, New Community Baptist Church, August 2017 – Present
Elementary Sunday School Teacher, New Community Baptist Church, May 2013 – Present
Classroom Assistant: ESL, Sunset Presbyterian Church, April 2004 – April 2006

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<https://github.com/cheecheeo/resume/blob/master/cv.pdf?raw=true>