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# Calvin Li

+1 (571) 245-7258 [chl5b@virginia.edu](mailto:chl5b@virginia.edu) U.S. Citizen

## WORK EXPERIENCE & RESEARCH

### **Airbnb - San Francisco, CA** - *Software Engineer*

September 2018 - Present

- Technical Lead for Homes Host Retention
  - Leading a highly cross-functional and diverse team of designers, product, researchers, data scientists, and of course, engineers
  - Asked to technically lead a new team to solve a vital, high impact, highly complex, and highly ambiguous surface area for Airbnb
- Tech Lead on Airbnb Plus
  - Supported how Airbnb vision for transitions millions of its assets to highly vetted, expertly design assets

### **Uber - San Francisco, CA** - *Software Engineer*

January 2016 - September 2018

- Technical Lead on Driver Surge Pricing
  - Lead architect to a real-time product at Uber Scale
  - Launched first iteration of paradigm shifting product in 2.5 months
  - Built systems to manage and gain insight on complex marketplace dynamics for a paradigm shift in Uber's pricing strategy
  - Pending Patent: Network Computer System to Implement Additive Service Values for Service Providers
- Technical Lead for Uber's marketplace simulation
  - Lead a team with 5 DS w/ PhDs in OR to build a stochastic simulator
- Technical Lead for Uber's Background Check System
  - i18n integrations with vendors all over the world
  - Fault-tolerant solution that scales to millions of users with complex international regulatory constraints

### **Google - Mountain View, CA** - *Software Engineer*

October 2014 - January 2016

- Search Ads Innovation Cars vertical team
- Contributed across Google's advertising stack, from C++ to CSS
- Completed extensive logs analysis and performed numerous experiments, several with large impact for Google's bottom line (> \$1 Billion per year)

### **Stealth Startup - Washington D.C.** - *Co-Founder, Technical Lead*

June 2012 - February 2014

- Full Stack Developer, Backend Architect, and Algorithm designer
- Rapidly dev and prototyping for enterprise software, hardware, and BLE

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## **Internship: CTIS Inc. - Rockville, M.D. - *UInnovate Fellow***

Summer 2011

- Worked with numerous cutting edge Health IT innovations and designs
- Lead organizer & writer of a submitted multi-million dollars SBIR Grant

## **Research: Refactoring CASA - Charlottesville, VA - *Student***

Spring of 2011 - Professor Andrew Grimshaw

- Optimizing the CASA code for processing signals from NRAO

## **Research: Patents - Charlottesville, VA - *Student***

Summers of 2009 & 2010 - Professor Gabriel Robins (Endowed Professor)

- Studied the landscape of intellectual property and innovation.

## **SKILLS**

**Natural Languages:** English, Chinese, & Japanese

**Programming Languages:** Java, C++, Python, Javascript, Go, Ruby, SQL, PSQL, Bash/Shell, HTML5, CSS, XML, JSON, Matlab, CUDA, AIPS++

**Technologies:** Proprietary Google technologies, Tornado, Node.js, Express, Numpy, Scipy, Backbone, Bootstrap, AppEngine, Cassandra, MySQL, MongoDB, MPI, GIT, Mercurial, Perforce, SVN, Heroku, Spring, Maven, Tomcat, Jade, Handlebars, JQuery, Underscore, Jupityr Notebooks, Tensorflow, Spark, PySpark, Hive, Presto, Kafka, Protobuf, Thrift, Avro, Zookeeper, MapReduce, Lombok

## **EDUCATION**

### **Georgia Institute of Technology, Atlanta, GA - *PhD Candidate***

July 2011 - June 2012

Department of Computational Science and Engineering

### **University of Virginia, Charlottesville, VA -**

*B.S. Computer Science & B.A. Economics and Philosophy*

August 2007 - May 2011

Dean's List. Graduate courses in Algorithm, Theory, & Cryptography. Economics focus in Game/Auction Theory. Philosophy focus in democracy.

## **AWARDS**

ACM's International Collegiate Programming Competition (ICPC)

- Qualified as one of the top 100 teams from over 7,300 teams, 83 countries
- Reached two-year world's limit after first two years, coached after
- Coached back-to-back teams to World's for UVA & Georgia Tech

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First Place Winner at the Barracuda Programming Competition

- Designed the winning algorithm with applied game theory against thousands of other competitors in head-to-head style competition

Won the 2011 BodyMedia® Health 2.0 Challenge with CTIS Inc.

- Lead designer in the concept and logo for the winning submission leveraging a social networking solution in Health Innovation space

Competed and Progressed in Imagine Cup Student Competition 2010-2011

- Designed embedded solution to promote primary education in developing countries as part of the UN Millennium Challenge.

## **OTHER LEADERSHIP & ACTIVITIES**

- Problem Writer, Selection Committee, Judge for ACM Programming Contests
- Martial Arts instructor, competitor, and life-long student since the age of 8
- American Parliamentary Debating Association - Top Ranked UVA debater
- Lead/Main Organizer of largest debate tournament in the history of Virginia