

# PAUL ASHBOURNE

Bachelor of Software Engineering (BSE), University of Waterloo 2018  
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3766 21st Street  
San Francisco, California  
USA 94114

## TOP SKILLS

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|--------------|----------------|------------|-----------|-----------|
| • Python     | • Apache Spark | • Redis    | • Node.js | • Go      |
| • Kubernetes | • SQL          | • RabbitMQ | • C++     | • MongoDB |
| • AWS        | • ReactJS      | • Ansible  | • Java    | • ROS     |
| • Terraform  | • Linux        | • Bash     | • Ruby    | • Docker  |

## EXPERIENCE

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### Embark Trucks Inc.

*Head of Infrastructure*

January 2017 – Present  
San Francisco, California

Python, Apache Spark, AWS, Kubernetes, Terraform, SQL, Docker, C++, ROS, Ansible, RabbitMQ, ReactJS

- Embark is a startup building autonomous semi trucks
- As a founding team member and later the team lead for infrastructure, I helped the company scale from 4 engineers to 40 and grew my own team from 1 to 6 engineers
- Built and managed infrastructure which supported petabyte-scale data storage, querying, streaming, machine learning, simulation, and analysis
- Architected all of our AWS services and infrastructure from scratch using Terraform
- Wrote all the code that runs on the vehicles to collect data
- Engineered systems which gave live access to the vehicles on the road, including live streaming, telemetry, code deployment and remote troubleshooting
- Built and managed several internal tools and labelling pipelines

### Remind, Inc.

*Software Engineering Intern, Social Capital Fellow*

April 2016 – August 2016  
San Francisco, California

Ruby, Go, Node.js, ReactJS, RabbitMQ, Redis

- Re-engineered a message delivery service which delivers over 500 million SMS and email notifications per month
- Built a new framework for assembling, scheduling and processing batch jobs

### Wish

*Software Engineering Intern*

Fall 2014, Fall 2015  
San Francisco, California

Python, MongoDB, Hadoop, HTML, CSS, JavaScript, Backbone.js, RabbitMQ, Solr

- Built a system to reduce shipping times by allowing merchants to store products in warehouses around the world
- Redesigned signup and onboarding flow from scratch, increased end-to-end conversion rate by 500%
- Developed a system to automate pre-orders of popular items, increased profit margins from 15% to 30%
- Rewrote internal MongoDB ORM to add support for efficient JOIN-like subqueries over pre-defined relationships

### ESCTT, Inc.

*Software Engineer*

July 2013 – April 2014  
Toronto, Canada

Python, PHP, MySQL, JavaScript, HTML/CSS, .NET

- Built a financial analysis application, risk management software, and a health care database

## SIDE PROJECTS

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- StoreStuff: On-demand self-storage app built for Berkeley's CalHacks 2.0, awarded Microsoft API prize (Node.js)
- Built a compiler for the WLP4 programming language to MIPS assembly (C++, Assembly)
- Password Ninja: A password manager with Chrome Extension (JavaScript, Bootstrap)

## EDUCATION

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### University of Waterloo

*Bachelor of Software Engineering (BSE), Honors, 2018*  
US GPA: 3.9/4

September 2013 – June 2018  
Waterloo, Canada