

# Joshua Li

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## Education

### Pennsylvania State University

B.S. COMPUTER SCIENCE, 3.78 GPA

University Park, PA

Aug 2015 - May 2019

## Experience

### Savioke

San Jose, CA

SOFTWARE ENGINEERING INTERN

May 2017 - Aug 2017

Worked on software tools used for and by Relay, Savioke's autonomous service robot.

- **Slashed data transmission bandwidth by 98%** - **ROS** data minimization pipeline written in **Python** and **bash**, deployed to Relays as a **Debian** package
- **Debugging setup process sped up from minutes to seconds** - Relay fleet-wide bagfile search and inspection web app (**Flask** + **JavaScript** + **Gunicorn** + **Apache** reverse proxy)
- **Reduced codebase size 10-fold** - high-abstraction, succinct **Python** interface to business-wide configuration data

### Musical Minds LLC

State College, PA

LEAD BACKEND ENGINEER

Sep 2016 - Jan 2017

Designed, built, and deployed a provisional web **REST API** using **Flask**, Amazon Web Services Elastic Beanstalk (**AWS EB**), and **DynamoDB** as a mobile backend.

### Penn State Applied Research Laboratory

State College, PA

DISTINGUISHED RESEARCHER, SOFTWARE ENGINEERING INTERN

May 2016 - Aug 2016

Created a **Java** application that plotted data graphs in 3D **Virtual Reality** space and allowed the viewer to navigate within using the Oculus Rift and a Xbox One controller.

## Projects

### tildeslash.io

Sep 2017 - Ongoing

Personal blog for documenting some of my programming pursuits and experiences. Built with **Hexo**, **Sass**, **Pug**, and **Gulp**. Deployed behind Cloudflare for HTTPS and content caching.

### pylibgen

Jul 2017 - Oct 2017

**Python** interface to Library Genesis. Set up with **Travis CI** for builds and unit testing, and published live on the Python Package Index (**PyPI**).

### blastmine

Jun 2017 - Jun 2017

**AWS EC2** server provisioning en masse via **Python** and **Shell** scripts. Instantly configures up to 280 remote **Ubuntu** 16.04 instances over SSH to mine Litecoin.

### ghJuicer

Jan 2017 - Feb 2017

**Python** script that automates the process of extracting metadata belonging to millions of GitHub accounts into a **SQLite** database.