

## EDUCATION

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### Bachelor of Science, Computer Science

June 2017 (Expected)

*University of California, Davis*

## PROFESSIONAL EXPERIENCE

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### Software Development Engineer Intern, Amazon | June 2016 – September 2016

*Built back-end software in Java for the AmazonFresh business team.*

- Implemented filtering system that uses business metrics to improve AmazonFresh search results.
- Introduced to and utilized some AWS services, like Simple Queue Service, Elasticsearch, and Lambda.
- Created and interfaced with many different datastores that are based on NoSQL mechanisms.
- Authored principal and critical design reviews, and maintained all other documentation until handoff.

## TECHNICAL PROJECTS

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### Feedr | Python, Django, PostgreSQL | [thedylanhouse.com/feedr](http://thedylanhouse.com/feedr)

*A Twitter service for keeping your followers engaged. Facebook support coming soon!*

- Implementing a web interface with Django to register users and to handle OAuth.
- Building a Raspberry Pi cluster for parallelization and to distribute loads between multiple processes.
- Parses XML from online sources and then Tweets the relevant data, i.e. text and an image.

### Walkiki | Java

*An Android app that allows you to create, share, or take a walk on a user-generated route.*

- Implemented a middle-tiered system that integrates with Google App Engine to update and display friend locations on a map in real-time.
- Utilized the Firebase API for local and cloud storage of user information.

### SpaceX Hyperloop Pod | C, C++, Python

*Software and Controls Engineer on the UC Davis team for a SpaceX Hyperloop pod design & build.*

- Engineering control systems using controllers, sensors, regulators, and other electrical hardware.
- Proposed our control systems design to a panel of SpaceX, Tesla, and academic judges at Texas A&M.

### Vastoverload | Java, MySQL, Swing | [github.com/vastlee/vastoverload](https://github.com/vastlee/vastoverload)

*Track your weight lifting progress from the desktop.*

- Implements a graphical user interface and adheres to the model-view-controller pattern.
- Utilizes an online database to update and retrieve user information, i.e. login and exercise data.

### TComm | C++ | [github.com/housed/tcomm](https://github.com/housed/tcomm)

*A text-based chat application for the Windows desktop.*

- Utilizes TCP/IP sockets and the client-server communication model.
- Implements a multithreaded approach for handling multiple client connections to a server.

## PROGRAMMING LANGUAGES AND TECHNOLOGIES

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(Skilled) Java, C++; (Proficient) Python; (Familiar) JavaScript, HTML/CSS, R, Haskell, Assembly ARMv6  
(Proficient) Django, SQL, NoSQL, Junit, Mockito, Git; (Familiar) Swing, Android