

EDUCATION

Bachelor of Science, Computer Science

June 2017 (Expected)

University of California, Davis

PROFESSIONAL EXPERIENCE

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

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

- Built search results filtering system with business metrics to drive-up customer conversion rates.
- Introduced to and utilized some AWS services, like Simple Queue Service, Elasticsearch, and Lambda.
- Created and integrated with many different datastores that are largely based on NoSQL.
- Authored principal and critical design reviews, and maintained all other documentation until handoff.

TECHNICAL PROJECTS

Feedr | Python, Django, PostgreSQL | 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

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

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

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