

Education

B.S. Computer Science, *Iowa State University*

Aug 2014 – Dec 2018

Honors: George Washington Carver Full-Tuition Scholarship, Dean's List 2014-2017

GPA: 3.93

Experience

Affirm - Software Engineering Intern

June 2018 – Aug 2018

- Currently implementing a new progressive user experience and user checkout flow as part of the Affirm Anywhere team.
- Improved testing infrastructure performance by 5x and refactored code to use dependency injection for more testability.
- Implemented analytics and built dashboards to track and analyze impressions across feature experiments.

Wealthfront - Software Engineering Intern

April 2018 – June 2018

- Implemented multiple end-to-end flows from scratch that launched as several new core Wealthfront experiences on iOS, such as windfall planning, clients' digest, re-authentication links, and securities owned by clients.
- Iterated on client feedback to build new UIs, APIs, and animations for the new account creation flow on iOS.

Shift Technologies - Software Engineering Intern

Jan 2018 – April 2018

- Developed an internal tool utilizing GoLang and PostgreSQL to automatically scrape, fetch, and price all auction vehicles from our target sources, which resulted in a ~91% increase in vehicle data collected and 1 hour saved for the auction team per day.
- Implemented and deployed a new inventory infrastructure to that allows Shift to scale their inventory needs across all regions.
- Created an internal tool to upload, decode, and price generic pilot vehicles in bulk.
- Built a full-stack dashboard with React.js, GoLang, and PostgreSQL to manage and update pricing & performance adjustments.

Google - Software Engineering Intern

May 2017 – Aug 2017

- Developed features for the Play Store app to drive additional downloads in related offerings, increasing revenue and downloads.
- Optimized the search metric infrastructure by reducing the number of logs by 50% and eliminating the search lookup's high failure rate due to inaccurate node parenting by providing accurate search event metadata lookup.

Google - Software Engineering Intern

May 2016 – Aug 2016

- Built the Today Extension widget for the Google News iOS app, providing quicker access to articles that are relevant to users.
- Created original design documents and worked extensively with the UX team to prototype the UI of the widget.
- Implemented analytics on the backend to collect user information to track usage of my feature.

Principal Financial Group - Software Engineering Intern

May 2015 – Aug 2015

- Added a new feature to the First Dental Health web app that allows users to find nearby dentists in their network.
- Implemented a tool to schedule automatic email delivery for payments and claims using C#/.NET and SQL.

Rockwell Collins - Software Engineering Coop

Jan 2015 – May 2015

- Worked on the internal tools team developing Altassian ALM tools to optimize performance on daily tasks.
- Developed a requirements navigation tool that became the most widely used internal tool for Q2 2015.

Projects

Check out macliu.net for more projects and details

StateClassAlert.com - Reverse-engineered ISU's Classes API and built a web and iOS app to alert students when their classes open up.

eHireMe - Mobile app designed to intelligently match employers with potential candidates based on experience, location, and interests.

Splash Talk - Android app that plays a sound when a text message is received based off of the mood of the text. Implemented using sentiment analysis.

MyDining - Reverse-engineered Iowa State's Flash-based Dining API and created an iOS app allowing students to order food on the go.

Programming Languages & Technologies

Proficient with

Java
GoLang
Swift/Objective-C
Python

Familiar with

JavaScript
C/C++
HTML/CSS
C#/.NET

Technologies

React /Node/JQuery
SQL/PostgreSQL/MongoDB
Git
Xcode/Android Studio/IntelliJ

Campus Involvement & Awards

Mobile Development Club – Social Chairman

Google Future.CS Program – Organizer

Computational Thinking Workshops – Instructor

HackMidwest – 2nd Place (2014)

HackISU – 3rd Place (2014), Venmo API Winner (2015)

Startup Weekend – 1st Place (2016)