

## Education

**B.S. Computer Science**, *Iowa State University*  
**Honors:** George Washington Carver Full-Tuition Scholarship, Dean's List 2014-2017  
**GPA:** 3.93

Aug 2014 – Dec 2018

## Experience

### Affirm - Software Engineering Intern

June 2018 – Aug 2018

- Accepted an offer to work at Affirm as a Software Engineering Intern for summer of 2018.

### Wealthfront - Software Engineering Intern

April 2018 – June 2018

- Accepted an offer to work at Wealthfront as a Software Engineering Intern on the Path team for spring of 2018.

### 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 for the pricing team to effectively 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 Play Newsstand 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.

### Agrisync - Software Engineering Intern

Sept 2014 – May 2015

- Implemented a backend system and an automated ticket bot in Node.js. Utilized Recast.ai for NLP for the ticket bot.
- Developed an initial iOS app and then pivoted to a cross-platform Xamarin application.

## Projects

Check out [macliu.net](http://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** – 2<sup>nd</sup> Place (2014)

**HackISU** – 3<sup>rd</sup> Place (2014), Venmo API Winner (2015)

**Startup Weekend** – 1<sup>st</sup> Place (2016)