

## 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:** 3.92

## Experience

**Google - Software Engineering Intern**

May 2017 – Aug 2017

- Developed features for the Play Store app to drive additional downloads in related offerings, which resulted in increased acquisitions and revenue.
- Optimized the search metric infrastructure by reducing the number of logs by 50% and resolving the search lookup's high failure rate, ~50%, by providing accurate search event metadata lookup.
- Worked extensively with the UX team, product managers, and fellow software engineers to design the features.
- Performed A/B testing to ensure implemented features actually outperformed the original features.

**Google - Software Engineering Intern**

May 2016 – Aug 2016

- Built the Today Extension widget for the Play Newsstand iOS app to provide quicker access to articles that are relevant to the users' interests.
- 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.
- Developed a fully functional budgeting mobile app for PFG Code Jam Competition, which won 1<sup>st</sup> place among all entries.

**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

**State Class Alert** - <http://stateclassalert.com> (Swift / JQuery / Node.js / MongoDB)

Spring 2017

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

**eHireMe** (Objective-C, Java, Node.js, MongoDB)

Spring 2016

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

**Splash Talk** (Java)

Summer 2015

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** (Swift)

Fall 2014

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

*\*More projects can be found at [macliu.net](http://macliu.net)*

## Programming Languages & Technologies

### Proficient with

Java  
Objective-C/Swift  
Javascript/Node.js  
Python

### Familiar with

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

### Technologies

Xcode/Android Studio/IntelliJ  
MongoDB  
Git/TFS  
Xamarin/Cordova

## 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)