

# Benjamin Carney

115 Adams Ave, Ann Arbor MI

[carneyb@umich.edu](mailto:carneyb@umich.edu) • (248)-709-5792

[benjamincarney.github.io](https://benjamincarney.github.io)

## EDUCATION

### University of Michigan, Ann Arbor, MI

*Bachelor of Science in Computer Science*

*Minor in Music Performance*

Coursework: Data Structures and Algorithms, Discrete Math, Calculus I & II, Probability, Statistics, Computer Organization, Computer Security, Physics I, Spanish

*April 2020*

GPA: 3.14/4.00

## EXPERIENCE

### Delivry Co, Ann Arbor, MI

*April 2018 - August 2018*

*iOS Development Intern*

- Collaborated alongside fellow iOS development interns in the designing and implementation of front-end interface using Swift programming language to achieve clean and reliable app functionality
- Incorporated several external APIs including GoogleMaps, Stripe, and AlamoFire in order to enhance app features and capabilities
- Performed unit-testing for over a thousand lines of code to ensure fast and reliable user experience

### Clinton River Watershed, Rochester Hills, MI

*April 2017 - August 2017*

*Education and Research Intern*

- Collected, analyzed, and logged water quality data retrieved from over 760 square miles of urban landscape in order to gauge severity of local stream degradation and pollution
- Compiled and presented stream quality data to supervisors and fellow employees, identifying problem-areas throughout various Metro Detroit communities
- Engaged in multiple education initiatives with local schools that were aimed at increasing stream quality awareness among grade-school students

### At-Home Music Lessons, Rochester Hills, MI

*November 2015 - August 2016*

*Music Instructor*

- Conducted private, one-on-one guitar, bass guitar, and piano lessons with several personal students focused on refining individual performance technique and ability
- Created curriculums personally attuned to each student's musical ability which aimed at encouraging consistent musical growth and expansion of knowledge
- Coordinated large, bi-annual music recitals showcasing over one hundred individual student's personal progress over a 6 month period

## PROJECT EXPERIENCE

### Garduino

*Automated Irrigation System*

*April 2018 - August 2018*

- Utilized arduino microcontroller to automate irrigation system within my personal garden throughout the spring and summer seasons of 2018, producing a yield of crops open to general public to pick and enjoy from
- Implemented code in C++ which read input soil moisture data from resistive soil-moisture sensor, resulting in either the flow or stoppage of water through gate within electric solenoid valve based on specific water-content threshold

### Personal Website

*April 2018 - August 2018*

*A static website used to showcase personal projects*

- Devoted free time throughout summer term to teaching myself HTML, CSS, Javascript, and Bootstrap framework in order to achieve the launch of my personal website for the Fall of 2018
- Self-taught a number of important web-development concepts essential to building accessible and responsive web pages for multi-platform viewing and interaction
- Utilized functional design concepts in order to achieve appealing and presentable appearance fit for the modern internet

## SKILLS

### Programming Languages

- *Proficient:* C, C++, Swift, Python, Java, Javascript, HTML, CSS
- *Familiar:* Objective-C, Ruby, R, PHP, SQL

### Software and Development Tools

- Git, XCode, Atom, Brackets, PyCharm, Unix, Mac OS, Microsoft Office

### Languages

- Spanish

## EXTRACURRICULARS

**Random Acts of Kindness** *Photography, General Member*

*September 2018 - Present*

**Michigan Hackers** *iOS Core Team Lead*

*September 2017 - Present*

**Phi Theta Kappa Honor Society**

*September 2016 - Present*

