

Lachlan McCarty

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EDUCATION

Princeton University

June 2022

Bachelor's of Science in Engineering, Computer Science

Princeton, NJ

- Relevant Coursework: Algorithms and Data Structures (COS 226), Advanced Vector Calculus (MAT 203), Intro to Programming Systems (COS 217, dual-enrollment, A+), Computer Architecture and Organization (COS 375, dual-enrollment, A)
- Activities: HackPrinceton Organizing Team (Development), Robotics Club

Princeton High School

June 2018

Princeton, NJ

- Activities: Computer & Robotics Club (President, Trinity College International Fire Fighting Robot Contest), HackPHS (Organizer of Inaugural Event, Workshop Presenter), *The Tower* (Online Co-editor)
- Awards: Computer Science Senior Award, Gold Key Award for Meritorious Service (5% of Junior class)

PROJECTS

Strobr Scope

September 2017

iOS App, Swift, Camera API

PennApps XVI

- iOS app designed to estimate illumination or rotational frequency of objects by varying the camera's frame rate in a similar way to how a stroboscope estimates rotational frequency using flashing light
- Available on the App Store at lachm.com/strobr or on GitHub at github.com/lachm/strobr
- Ranked among top 30 teams out of 150 teams

SciBowlBuzzer.com

May 2017

Web App, Python, Flask, WebSockets

StuyHacks 2017

- Web app designed to replace traditional physical Science Bowl buzzer systems
- Question reader manages the game from a dashboard while players buzz in through a mobile oriented page
- Hosted with Heroku at SciBowlBuzzer.com and available on GitHub at github.com/lachm/SciBowlBuzzer

TrailMaps

November 2016

iOS App, Swift, Firebase API backend, Apple Maps API, Location Services

HackRPI

- iOS app that allows users to map, annotate, and share hiking or biking trails
- Won "Best Mobile Hack" at HackRPI

EXPERIENCE

Princeton University Computer Science Department

September 2018 - Present

COS 217 Undergraduate Grader

Princeton, NJ

- Grade assignments for large CS major prerequisite course
- Only first-year grader for COS 217

Rutgers WINLAB (Wireless Information Network Laboratory)

June 2017 - August 2017

Summer Intern

North Brunswick, NJ

- Augmented the safety and functionality of a bicycle with an app and wireless connected sensors, lights, and lock
- Controlled system over Bluetooth LE from Android app by implementing a GATT server on a Raspberry Pi

TECHNICAL STRENGTHS

Programming Languages

Python, Java, C, JavaScript, Swift, MIPS, x86

Markup & Style

LaTeX, HTML, CSS, Jekyll

Tools

Git, GitHub, Slack, bash

Technologies

Flask, Django, iOS SDK, jQuery, Chrome Extensions