

# Jonathan Carlson

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## Education

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### University of California, Los Angeles (UCLA)

Los Angeles, CA

B.S. in Computer Science, GPA: 3.7

Sep. 2019 – Jun. 2023

- Relevant UCLA Coursework: Data Structures and Algorithms, Intro to Computer Organization, Software Construction Projects, Multivariable Calculus, Linear Algebra
- Independent Coursework: Stanford Machine Learning (Coursera), Deep Learning (deeplearning.ai)

## Experience

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### HydroPoint Data Systems

Petaluma, CA

Engineering Intern

Jan 2021 - Present

- Using machine learning to help them optimize their water leak detection capabilities.

### Insta-Chef (CS97 Project)

Los Angeles, CA

Full Stack Developer

Feb. 2021 - Mar 2021

- Used React and Firebase Realtime Database to create a recipe-finding website that leverages ingredients a user has in their kitchen using TheMealDB API.
- Enabled common workflows including: managing a Pantry, saving your favorite recipe, finding new recipes.
- Styled the Login and Pantry pages so they're accessible for mobile users.

### IDEA Hacks

Los Angeles, CA

Corporate Committee Member

Jun. 2020 – Jan. 2021

- Connecting and securing sponsorships with tech companies such as Qualcomm, to fundraise for the largest hardware hackathon on the west coast, IDEA Hacks.

### WakeU

Los Angeles, CA

Team Member of WakeU at IDEA Hacks

Jan. 2020

- Created a smart sleep tracker that woke the wearer during their lightest sleep cycle.
- Wirelessly communicated acceleration data from an IMU on Arduino to Raspberry Pi using Bluetooth.
- If the wearer moved past a pre-defined acceleration threshold, a speaker attached to their ear wakes them.

### IEEE Student Branch at UCLA

Los Angeles, CA

Open Project Space (OPS) Member

Oct. 2019 – Mar. 2020

- Implemented serial communications such as SPI using Arduino, designed a PCB using EAGLE.
- Used an Arduino, IMU, and I2C to change the brightness of LEDs based on IMU orientation.

## Skills

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### Programming Languages

Python, JavaScript, C++, C, Arduino, R, Bash

### Frameworks & Misc

TensorFlow, React, Firebase, Git