

# Sean O'Connor

GitHub [/oapostrophe](#) | LinkedIn [/in/oapostrophe](#)  
Project Demos + Tech Blog [oapostrophe.github.io](#)

Claremont, CA  
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## Education

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### Pomona College

BA, Computer Science (3.9 GPA)

*Graduating May 2022*

Claremont, CA

*Select Courses:* Computer Systems, Neural Networks, Linear Algebra, Data Structures, Theory of Computation

## Skills

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**Highly Skilled:** Leadership, Cross-Functional Communication

**Proficient:** Java, Python, Javascript, FastAI, Flask, SQL, Data Science, UX Research

**Prior Experience:** Spark + Hive, Haskell, Scala, C, Linux + Bash, Matplotlib, Pandas

## Industry Experience

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### Indeed (Targeted Ads)

*May-August 2021 (3 months)*

#### *Software Engineer Intern*

Seattle, WA

- Researched, developed, and deployed a segmentation algorithm **classifying ~100 million users per day**.
- Collaborated with Ads Infrastructure team to design a system for persisting segments in a low latency key-value store.
- **Drove a cross-team Machine Learning experiment** introducing segment features to Indeed's Resume Search. The results projected a **3% increase in the product's key Positive Outcome**, one of the largest in recent history.
- Showcased my work in the Indeed Ads division's 50-person quarterly business review meeting.

### Emergency Medical Services Organizations

*March 2015-July 2019 (4 yrs 5 months)*

#### *EMT (Team Lead)*

Detroit, MI

- Led **cross-functional teams of 2-7 responders** to ~6,000 medical 911 calls on the busiest ambulances in the US.
- Received **Detroit Fire Commissioner's Award** for a dangerous, lifesaving rescue from a car crashed into a building.

## Academic Experience

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### Pomona Autonomous Robotics Lab

*January 2021-May 2021 (4 months)*

#### *Research Assistant*

Remote (Seattle, WA)

- Developed a language that **shortens XML robotics simulation code by 92%**.
- Built a Javascript app that parses input to a context-free grammar, translates to XML, and generates a 3D visualization.

### Pomona Computer Science Department

*September 2020-May 2021 (9 months)*

#### *Teaching Assistant*

Remote (Seattle, WA)

- **Led weekly 10-15 student mentorship sessions** explaining technical concepts and debugging assignment code.

### Pomona Privacy and Security Lab

*June-August 2020 (3 months)*

#### *Research Assistant*

Remote (Seattle, WA)

- Led a team of 3 researching the UI design of California Consumer Privacy Act (CCPA) opt-outs.
- Developed a Python + Flask backend to A/B test CCPA designs. **Deployed experiment website to 4,357 users**.
- Analyzed results and **submitted a paper as first author** to a major peer-reviewed conference (review pending).

## Projects

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### Novel Image-Based Heart Attack Detection (Academic) - Python, FastAI

*Spring 2021*

- Created a proof-of-concept for a neural net classification method that could **reduce heart attack mortality by 50%**.
- Simulated 21,000 EKG images from numeric records. Trained a convolutional neural net to 90% accuracy / 71% recall.

### Who's Selling My Info? (Independent) - Javascript

*Fall 2020*

- Developed a browser extension that **detects hidden data sale opt-outs** during browsing. When found, the extension generates a notification linking to the opt-out. Achieves 92% recall / 100% precision on top 100 US homepages.