#### Best Use of Postmates API | (Python, Tornado, Azure, Postmates API, HTML/CSS)

Our app, CrowdFoods, simplified payments for food services by allowing users to pay smaller, prorated amounts • which won Postmates Choice Award \$1000

# **EDUCATION**

University of California, Irvine - B.S. Electrical Engineering, 2015-2019 AppAcademy - 16-week full stack web development course, Jan - May 2022

## SKILLS

Languages | Javascript, Ruby, Java, C++, C, Python, Shell, SQL, HTML5, CSS, XML Frameworks | React.js, Redux, Ruby on Rails, Node.js, Express, Mongoose, Spark Java, Jest, PyTorch Tools | IntelliJ, AWS, Gitlab CI/CD, Visual Studio, Qt Creator, postgreSQL, MongoDB, Webpack, Linux, Heroku

# PROJECTS

805-616-1163

Fetchwell | (React/Redux, Ruby on Rails, Node.js, postgreSQL, AWS, HTML/CSS) Fullstack clone of clothing brand Madewell's online shopping site. Mobile friendly.

- Implemented efficient state and props management strategies to minimize the number of queries and rerenders to increase performance
- Utilized the URL path to persist filter state upon page refresh to DRY up code and reduce the number of queries •
- Employed RESTful API methodologies when developing backend routes and queries .

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#### TheftDeflect | (React/Redux, Node.js, MongoDB, Express.js, Google API, AWS, HTML/CSS) Single-page web app that allows users to view and report hotspots of vehicle thefts and vandalism

- Employed Google Maps API to generate a heatmap of criminal hotspots and create markers of incident locations
- Optimized performance of EventListeners to significantly reduce load time and increase map responsiveness
- Implemented image uploading capabilities using AWS S3 allowing users to store and retrieve accident images

#### UAV Forge | (C++, Qt Creator, Sockets, AWS SageMaker, OpenCV, Python, Tensorflow) Competitive UAV Project Design Team

- Built a ground station capable of autonomous UAV control and obstacle avoidance for the annual AUVSI competition • in a team of 25+ members
- Wrote an image processing pipeline capable of identifying and classifying high confidence targets using optical character recognition, and localizing identified targets using geopositioning
- Utilized OpenCV for image processing algorithms and Amazon SageMaker to build and train the convolutional neural network used to identify letters and numbers

# **EXPERIENCE**

#### Systems Engineer 1 | (DOORs, Creo)

Raytheon Technologies - Los Angeles, CA

- Analyzed electrical schematics and design specs to determine root cause of radar hardware failures •
- Provided technical repair procedures and guidance for testing and redeployment of radar modules •

#### Systems Engineering Intern | (C++, C, Gitlab Cl/CD, OpenCV, XML)

General Atomics - San Diego, CA

- Developed imaging software for the Lynx Radar to significantly improve its capabilities in locating targets of interest •
- Created continuous integration pipeline and unit tests to automate testing of system modules •
- Integrated roadmap datasets and probability maps to increase the accuracy of successful classification
- Employed vector analysis strategies to approximate target trajectories and paths •

# **AWARDS**

# live | aithub

#### article | github

### June 2018 - Sept 2018

LA Hackathon 2016

Mar 2020 - Dec 2021



<u>live</u> l <u>github</u>

#### github.com/pdlai

philliplai.me