

EDUCATION

California Polytechnic University, San Luis Obispo, California

B.S of Computer Science

September 2017 – June 2021

Relevant Courses: Data Structures, Algorithms, Data Science, Artificial Intelligence, Database Modeling and Implementation, Human and User Centered Interaction, Operating Systems, Programming Languages, Theory of Computation, Computer Architecture, Graph Theory, Combinatorics, Game Theory

TECHNICAL SKILLS

Programming Languages: Python, Java, Javascript, C, and Racket

Data Science Frameworks: Numpy, Pandas, Tensorflow and Keras, PyTorch and Fast.ai

Web/Mobile Frameworks: React.js, React Native, Angular, Django, Spring Boot, Node.js, Spring Boot, and Express

Prototyping Tools: Adobe XD, Figma, Invision, Miro, Balsamiq

Version Control: Git

EXPERIENCE

Cal Poly

Student Researcher

September 2018 – January 2021

Created a command line utility to optimize properties of n-monomer reactions using Python and genetic algorithm pseudocode

Showed research at the Western Coating Show amongst other polymer related research

Refining the command line utility to incorporate the use of machine learning pipelines with minimal overfitting using Tensorflow and Keras

SLO Hacks

Web Developer / Tech Team Member

September 2017 – April 2019

Followed best agile practices through weekly standup and check-ins

Helped build a hacker-centric atmosphere on campus through in-person advertising

Created an attendee application system in React and Firebase to manage over 500 decisions for our flagship event, SLO Hacks

Made landing pages in React and Gatsby to provide information to potential attendees about various different events that would be hosted

PROJECTS

Secure Taction

A mobile application that would help manage a user's finances and prevent credit-card based identity theft

Implements a 2FA-esque system that gives a user a notification during a financial transaction

Powered by Plaid's API to link a user's banking information for users to create customized budgets and see transaction trends

Utilizes Java Spring boot and DynamoDB to perform requests to respond user interaction

Makes use of React Native to allow both iOS and Android users to interact with the app

Development will cease June 2021 and can be seen on my GitHub

Autonomous UAS Inventory Management

Built a fast.ai multilabel classifier to detect different fiducial tags in images

Used different computer vision frameworks (OpenCV, BoofCV, etc.) to decode QR codes in images

Constructed datasets through onsite data collection and labelling through labelbox

Development has ceased and more information can be found on my GitHub

POSTERS

Multiple Objective Optimization of Coating Resin Synthesis using Evolutionary Search

Western Coatings Symposium and Show

October 2019

Stanley Armstrong, Anthony Griffin, André Lagron, Madeline Schultz, William Thompson, Erik Sapper