

## 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

**Languages:** Python, Java, Javascript, C, SQL

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

**Web Frameworks:** React.js, Angular, Django, Node.js and Express

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

## EXPERIENCE

### Secure Taction Startup

*Software Engineer*

**November 2020 – Present**

Created 3 user personas using data from 15 moderated remote user interviews conducted over Zoom  
Developing a smart fraud detection application using Tensorflow, Keras, Django, and React

### Cal Poly

*Research Assistant*

**September 2018 – Present**

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

### 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

### Brian Bot

Welcomes new users to Discord guilds to help out new users joining a community  
Talks to users entering a voice channel using Google's TTS Python API  
Invites users to a Discord guild's GitHub organization using GitHub's Python API  
Development is still in progress 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