

# Alex Joseph Peterson

| Yucaipa, CA | [Petersonalex99@gmail.com](mailto:Petersonalex99@gmail.com) | (909) 705-6842 | [www.linkedin.com/in/AlexPeterson99](http://www.linkedin.com/in/AlexPeterson99) | [github.com/APet99](https://github.com/APet99) |

## Experience

### **Software Developer Intern**

May 2020 – September 2020

PR Skate – Remote Work

- Design, code and debug software systems to improve employee workflow and productivity.
- Integrated multiple languages to efficiently achieve business requirements.
- Enhanced communication skills through remote development.
- Developed a Django web service with an HTML/CSS and JavaScript user interface.
- Created a RESTful API to interact with a Mongo DB.

### **Software Engineering Teaching Assistant and Tutor**

September 2019 – August 2020

California Baptist University – Riverside, CA

- Teaching assistant and tutor for *Data Structures* and *Algorithms* courses.
- Supported software engineering students in the learning of object-oriented programming in Java.
- Assisted in the grading process of student assignments.
- Facilitated problem-solving in the design and development processes.

### **Intro to C++ Tutor**

September 2018 – December 2018

California Baptist University – Riverside, CA

- Tutored an introductory to programming class taught using the C++ language.
- Trained students in the learning process by influencing abstract and critical thinking.

## Software Projects

### **AI/ML Classification Analysis**

- Implemented machine learning classification models to analyze the accuracy and efficiency of classification algorithms.
- Prepared datasets by cleaning, transforming, normalizing, and flattening data inputs.
- Utilized supervised learning to train and classify road signs.
- Machine learning models were implemented using scikit-learn.
- Compared performance of five algorithms across both colored and grayscale datasets.

### **Grading Automation Script**

- Built a script that automated the homework grading process by comparing student submissions to instructor tests.
- Utilized Python to retrieve all student submissions, then compile student source code and instructor unit tests.
- Saved more than 20 hours of grading every week.

### **Smart Home Accessibility**

- Synthesized a working prototype of a disability assistance glove allowing users to communicate with smart home devices through sign language.
- Glove hardware included an Arduino Uno and flexible potentiometers.
- A flexible potentiometer determined hand movements. The data was a serial input that a C++ program used to identify commands and dispatch auditory commands to nearby devices.

## Education

California Baptist University, Riverside, CA  
Bachelors of Science in Software Engineering

May 2021  
*Magna Cum Laude*

## Skills

- Java, C++, Python, HTML/CSS, JavaScript, SQL, MongoDB, Django framework, Android development in Java, and machine learning in Python. Familiarity with C#, and Node JS.
- Experience with agile software development, object-oriented programming, test-driven development, remote software development, and project management.