

# ANDREW POLK

andrew@polklabs.com · [www.linkedin.com/in/polkandrew](https://www.linkedin.com/in/polkandrew) · [www.polklabs.com](http://www.polklabs.com)

## WORK EXPERIENCE

### **SOFTWARE DEVELOPER, TECOLOTE RESEARCH INC, IT SOFTWARE DEPARTMENT**

05/2019 – PRESENT, GOLETA, CA

- Developed enterprise web applications using Angular and .Net frameworks
- Designed and implemented software components, systems and features for complex concepts
- Code, test, deploy, and maintain software for desktop and mobile devices
- Work with users to improve and develop new software systems

### **RESEARCH INTERN, NAVAL POSTGRADUATE SCHOOL, INFORMATION SCIENCES DEPARTMENT**

06/2018 – 08/2018, MONTEREY, CA

- Gained knowledge in data visualization and manipulation while working with enormous amounts of data
- Used neural networks and other programs for problem solving
- Corresponded with high-ranking researchers on datasets ranging from education to networking attacks
- Authored multiple deep learning based scientific papers in collaboration with PhD researchers

## EDUCATION

### **BACHELOR OF SCIENCE, COMPUTER ENGINEERING**

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

06/2019

- Electrical/Computer Engineering, Computer Science, Networking, Computer Security
- Achieved Dean's Honors, Data Science club member

## PROJECTS

[HTTPS://WWW.POLKLABS.COM/PROJECTS](https://www.polklabs.com/projects)

### **DROWSINESS DETECTOR, SENIOR CAPSTONE PROJECT**

09/18 – PRESENT, UC SANTA BARBARA, CA

- Collaborating on a Python desktop program that detects drowsiness in a user and alerts them through input from a webcam
- Guided a project structure as the technical lead while implementing some of the core functionality
- Created an accompanying mobile application to view information and statistics from the main program

### **A.I. ANOMALY DETECTION, NAVAL POSTGRADUATE SCHOOL**

06/18 – 08/18 MONTEREY, CA

- Worked on anomaly detection using machine learning and big data platforms
- Visualized large datasets for processing and looked for visual anomalies
- Strengthened Python neural networks for greater efficiency and results

### **RGB MATRIX GAME, SENSOR & PERIPHERAL INTERFACE DESIGN**

01/18 – 03/18, UC SANTA BARBARA, CA

- Implemented an interface for communication between an RGB-Matrix and a C based development board
- Facilitated the creation of a pixel-based game to display a fundamental understanding of the hardware and software

### **REEL RATINGS, UCSB DATA SCIENCE CLUB**

09/17 – 03/18, UC SANTA BARBARA, CA

- Developed a web application that can predict the rating of a movie with the title entered by the user; prediction relies on movie datasets and calculates a result using a statistical model
- Collaborated with a diverse team of students while working as the development lead
- Designed both a local and web-based solution to an undefined problem

## SKILLS

- A wide range of IT knowledge including programming languages C#, Java, Python, C++, Typescript, JavaScript, HTML, Android App Development, and data visualization
- Proficient understanding of electrical, mechanical systems and new equipment
- Efficiently created programs for clients to give them a working prototype
- Able to comfortably work on both computer systems and components