KOBY BARRETT

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EDUCATION

Sacramento, CA

California State University, Sacramento

Fall 2018 - Dec 2022

- Major: Computer Engineering, B.S.E. (in-major GPA: 3.75)
- Programming Coursework: Algorithms & Data Structures, Operating Systems, Networks, Machine Learning
- EE Coursework: Embedded Systems, Computer Arch., Circuits, Logic Design, VLSI Design

Remote

UC Berkeley Bootcamp

July 2023 - Jan 2024

- Program: Full Stack Coding Bootcamp
- **Technologies Used:** HTML, CSS, Javascript, Node.js, Express, SQL, NoSQL, MongoDB/Mongoose, GraphQL, React, Redux Toolkit, Websockets, JSON Web Tokens(JWT), Bootstrap, Material UI, ChatGPT, Jira, Git/Github

EMPLOYMENT

Technical Analyst

Inductive Automation

Feb 2023 - Present

- Worked on tickets to help customers with troubleshooting and/or creating solutions ranging from:
 - Analyzing wireshark captures to determine network activity for sessions between clients and servers
 - Reviewing logs to discover any output from our software that could help lead to a solution
 - Creating/optimizing Python scripts or SQL queries to help the development of a customer's project
- Graded customer's certification tests
- Answered questions that were posted to our forums

IT Administrative Assistant

Matheson Trucking Inc

Dec 2021 - Feb 2023

- Managed and created user accounts with Windows Active Directory
- Wiped and set up operating systems on computers
- Wired warehouses for their OT network and measured network speeds

SOFTWARE PROJECTS

Social Media Website Clone

- Developed a Twitter-inspired social media app to connect users to each other
- Used React and Redux Toolkit to manage the user's view and state of the application
- Integrated websockets for real-time messaging in chat rooms and notifications
- Managed all models (users, posts, chatrooms, messages, etc.) with Mongoose
- <u>Utilized</u>: Javascript, React, Redux Toolkit, Express, Mongoose/MongoDB (NoSQL), Node, GraphQL API,
 Websockets, JWT, Material UI

Self-Driving RC Car

- Implemented a manual and self-driving rc car that can be controlled with a playstation controller
- Used OpenCV to manipulate the input images coming from an USB camera
- Trained neural networks using Pytorch with handmade datasets
- Optimized performance by integrating multithreading to handle the ultrasonic sensor and image input in separate threads
- <u>Utilized</u>: Python, OpenCV, Pytorch, Neural Networks/Machine Learning, Raspberry Pi

Operating System

- Created an operating system that reacts to user input and schedules simple processes
- Developed drivers for a VGA text display, keyboard, and a TTY interface
- Implemented interrupts for keyboard input, a PIC timer, and software interrupts
- Utilized: C, Assembly, Makefile, Virtual Machines, Linux

Skills

Software: (proficient) Javascript, Python, HTML/CSS (familiar): Java, C, SQL