

SON MAC

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EDUCATION

University of Arizona

2019 – 2023

Degree: BS in Electrical and Computer Engineering — **Honors:** Summa Cum Laude

GPA: 3.92/4.0

Coursework: Object-Oriented Software Design, Web Development and the IoT, Fundamentals of Computer Organization, Information and Network Security, Computer Network, Data Structures and Algorithms

EXPERIENCE

Software Engineer

Feb 2022 – Present

Institutional Knowledge Map (kmap.arizona.edu) - UArizona

Tucson, AZ

- Collaborate on codebase migration to Next.js 12 to improve search engine optimization through server-side rendering.
- Pioneer the complete revamp of onboarding pages with contemporary design and features. Build and streamline internal reusable React components to enhance development consistency and efficiency.
- Drive a successful project to engineer a personalized dashboard and increase visibility for over 5000 faculty members by visualizing publications and research activities data using Plotly.js and D3.js.
- Cooperate with data engineers to build and maintain 50+ private/public RESTful data routes with Next API/Express.

Front-end Developer Intern

May 2022 – Aug 2022

Shopify Inc.

Remote

- Improved usability of Finances Overview page through over 1000 lines of React code shipped to production, including fixing visual defects, building new skeleton components, and enhancing data display in analytical charts.
- Identified and collaborated on implementing a back-end solution to address a significant disparity between web-displayed revenue and stored data for 10,000+ merchants.
- Modified and added more than 45 Jest unit tests; utilized Storybook to visualize, develop, and test components efficiently.

PROJECTS

Antaris - Engineering Capstone | *Next.js, Node.js, Amazon/MyDataHelps API, MongoDB*

Sep 2022 - May 2023

- Championed a 5-person team to create a cutting-edge health monitoring system, seamlessly linking researchers and patients through Amazon Alexa devices, complemented by a Next.js full-stack web application.
- Utilized RESTful API to streamline prebuilt surveys to management dashboard and enabled instant delivery to Alexa devices via Next serverless functions. Implemented Amazon account linking to ensure data security for patients.
- Shortlisted among 3 finalists for Best Software Design in UArizona Engineering Interdisciplinary Capstone competition.

Health Tracker | *AWS EC2, MongoDB, Node.js, Express.js, jQuery, Plotly.js, Particle.io*

Sep 2022 - Dec 2022

- Led a team of 3 to build a website visualizing heart rate and blood oxygen saturation records from a physical device.
- Designed and engineered a personalized dashboard for device control and real-time data visualization via dynamic charts.
- Established connection to Particle.io cloud to gather and publish live measurements via 10+ RESTful API endpoints.

All-In-One Social Media | *React, Bootstrap, Firebase, Facebook Graph API*

Jan 2022 - Mar 2022

- Developed and deployed a React web app providing all-in-one social media management for restaurant and shop owners.
- Integrated Facebook APIs to enable publishing, updating, deleting, viewing, and scheduling content on business accounts.
- Utilized Firebase for email-password authentication and data storage.

Restaurant System | *Java, Swing, Acceleo, Papyrus, Eclipse*

Sep 2021 - Nov 2021

- Led a 3-person team to create a simulated restaurant management tool with Java that enables actions such as hiring/firing employees, adjusting pay rates, viewing/updating menus, placing orders, making payments, and submitting reviews.

SKILLS

Programming: JavaScript, TypeScript, HTML, CSS, Python, Java, C++, C, SQL, Git

Web Development: React, Next.js, Node.js, Express.js, jQuery, Jest, React Testing Library, Bootstrap, Material UI, D3.js

Tools: GitHub, Jira, Heroku, Postman, Netlify, Storybook, Sequel Ace, Neo4j, VSCode, Eclipse, RStudio