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**PROFESSIONAL SUMMARY**

Innovative Software Developer with expertise in Mobile and Web Development, specializing in Front-end stack like JavaScript and React. Proven track record of leading projects, optimizing UI performance, and enhancing efficiency. Adept at collaborating with cross-functional teams to deliver high-quality, maintainable code. Passionate about driving technological advancements to deliver impactful results.

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**SKILLS**

JavaScript; React; CSS; HTML; Node.js; RESTful APIs; Git Version Control; Django; MySQL; Kotlin; Java; Android Studio; Python; C; C++; Linux; Wireshark; Visual Studio Code; MSOffice Suite; Android Open Source Project (AOSP); OpenAI

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**EXPERIENCE****RadicalAI, Milpitas, CA (Remote)****May 2024 – Present**

Software Developer Intern

- Enhancing user experience through refined UI components, ensuring seamless interaction and responsive design for the AI learning companion ReX, leveraging OpenAI, Node.js and Python
- Driving the feature development by collaborating with cross-functional teams, delivering new functionalities while ensuring code is clean, efficient, and maintainable for superior performance

**San Diego State University, San Diego, CA****Dec 2023 – May 2024**

Research Assistant

- Led the design and construction of an advanced swarm drone interface in Python and a custom network in C++ respectively, achieving enhanced inter-drone communication capabilities
- Achieved a perfect 100% detection rate for dropped packets by pioneering communication protocols for packet loss analysis to ensure robust data integrity
- Oversaw the research of advanced modulation techniques to optimize packet transmission, potentially improving the overall communication efficiency by 40%

**Sigma Connectivity Inc, Carlsbad, CA****June 2023 – Sept 2023**

Software Engineering Intern

- Led the development of a network usage logging application, improving real-time data visualization on Android devices by developing an intuitive interface, enhancing user interaction
- Designed and implemented a circular buffer driver as a system service using JNI and HAL by expanding an AOSP API with 3 new methods, resulting in efficient data handling and reduced memory usage
- Integrated custom Kernel sources into AOSP, replacing the default Kernel, strategically enhancing and boosting Android system stability and performance

**Avid Technology, Pune, Maharashtra, India****Oct 2020 – June 2021**

Hardware-Firmware Engineering Intern

- Directed the end-to-end development of a Heads-Up Display for 2 wheeler EVs, leveraging Bluetooth Low Energy (BLE) to enhance connectivity and user experience
- Championed the prototyping and testing of PCBs, setting new quality benchmarks and increasing assembly efficiency by 10%
- Engineered maintainable code to streamline firmware operation, significantly optimizing performance and ensuring a seamless user experience

- Developed a user-centric application to enhance UI/UX, ensuring seamless connectivity with the Heads-Up Display via phone

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## EDUCATION

**San Diego State University, San Diego, CA**

**Aug 2022 – May 2024**

Master of Science Electrical Engineering

**Savitribai Phule Pune University, Pune, Maharashtra, India**

**Aug 2018 – May 2022**

Bachelor of Engineering Electronics and Telecommunication

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## PROJECTS

### Interactive Frontend Chat Application

**July 2024**

- Developed an engaging and intuitive frontend chat application enabling seamless user interaction with the chatbot powered by OpenAI's GPT-3.5
- Implemented real-time chat interface using React ensuring smooth and responsive communication for the users
- Innovated an activity dashboard featuring real-time user activity metrics, utilizing Material UI and data visualization libraries for interactive graphs and charts

### Hybrid Cluster Tree with AODV Routing Protocol

**Aug 2023 – Dec 2023**

- Architected a wireless sensor network using a cluster tree model in Python, which optimized communication, energy, and efficiency by introducing intermediate routers, effectively mitigating cluster overlap, reducing the cluster heads by 50%
- Innovated a recovery algorithm that boosted the network recovery by 70%, ensuring robust and reliable operation
- Integrated AODV to develop a hybrid model, significantly enhancing the network's adaptability and responsiveness to dynamic conditions

### SDSUEats Ordering Platform

**Sept 2023 – Dec 2023**

- Architected and designed a food ordering platform using HTML, CSS, JavaScript and MySQL implementations with Django for managing database and model and queries
- Implemented RESTAPI calls which provide access and update capabilities while also facilitating data serialization
- Configured Docker for seamless deployment, ensuring efficient database management and ease of scalability

### Chatroom using Python Socket Programming

**Feb 2023 – April 2023**

- Implemented a multi-client server which handles up to 6 clients simultaneously with graceful client disconnection
- Enhanced performance and optimization was achieved by guaranteeing uninterrupted service for all active clients
- Devised and designed a UI for Linux terminals, leading to a 95% positive feedback for ease of use

### Multi-Purpose Surveillance Rover

**Nov 2021 – June 2022**

*Sponsor- Learnalytics Tech Academy Pvt.Ltd, Pune, Maharashtra, India*

- Engineered a versatile rover leveraging Raspberry Pi 3B+ to interface with sensors to facilitate metrics and data collection in remote environments
- Implemented a hybrid power system combining battery and solar panel, ensuring uninterrupted 5+ hour operation per charge
- Developed an Android app streamlining remote control enhancing maneuverability and accessibility