### JAIYANTH LAKUMARAPU

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A Software Engineer with 2+ years of experience in web development and testing. Proficient in python, JavaScript, React, Node.js, AWS, manual and automated testing, Seeking new opportunities to leverage my skills and drive technological advancement in a dynamic team environment.

# **EDUCATION**

George Mason University, Fairfax, Virginia, USA, May 24

Masters in Computer and Information Sciences (MSCS)

Vellore Institute of Technology, Amaravati, Andhra Pradesh, India, May 22

Bachelor of Technology in Computer Science (BTECH)

#### SKILLS

- Languages: Java, Python, Shell, JavaScript, HTML/CSS, TypeScript
- Frameworks and Libraries: React JS, Next JS, Node JS, Express, FastAPI, Tailwind CSS, Bootstrap
- **Databases:** SQLite, MongoDB, Firebase
- Tools: Git, Babel, Webpack, NPM, Postman, Docker, Vmware, QEMU
- Operating Systems: Linux, Windows
- **Protocolos:** TCP/IP, HTTP, OSPF, ISIS, BGP, LDP

#### **EXPERIENCE**

# Web Developer, George Mason University, VA, USA, March 24 - May 24

- Created AI chatbots with OpenAI models, generating over 100 test assessments, cutting manual workload by 40%.
- Engineered user interfaces using React.js, Next.js, and TypeScript, enhancing user satisfaction by 30%.
- Leveraged function-calling techniques with OpenAI models to chatbot for API calls within the Canvas LMS.
- Fine-tuned OpenAI models, improving response generation accuracy by 20%.

# Software Engineer, Green Buds Technologies, Vijayawada, India, June 20 - May 22

- Worked in a cross-functional team to develop an ecommerce SPA with React, NodeJS, MongoDB, and Recharts.
- Utilized Lighthouse to monitor UI performance, boosting it by 24% with multiple techniques like lazy loading, etc.
- Created detailed test documentation, including test plans, test cases, and test reports.
- Contributed in manual testing and in developing automated test suites using Playwright for efficient testing.

#### **PROJECTS**

# KeyBinder - A VS-Code extension for managing keybindings, May 24

- Created a VS Code extension, to manage keyboard shortcuts using JS, HTML, CSS, and the VS Code API.
- Incorporated over 50 custom React.js and JavaScript shortcuts, released on the Visual Studio Code Marketplace.

# Netflix AI - A netflix clone with AI movie suggestion feature, March 24

- Developed a Netflix clone with React JS, Tailwind CSS and Firebase for user authentication and real-time database.
- Employed OpenAI model (turbo3.5) for movie recommendations based on user input in over 100 languages.

# **Hungry Hub - Food Ordering System, December 23**

- Designed a Food Ordering System with 4 food categories and 25+ dishes using React JS, Node.js, Tailwind CSS.
- Ensured data synchronization with RESTful APIs, HTTP requests and Firebase for authentication and data storage.

# Knock Detector with Arduino and QEMU Emulation, August 23 - November 23

- Developed a knock detection system using Arduino, BeagleBone, Piezo sensor, and servo motor, programmed in C.
- Employed QEMU to emulate multiple OS configurations for testing, significantly reducing development time by allowing rapid iteration without repeated redeployment to BeagleBone.

# Plant Disease Identification System Using Machine Learning, August 21 - October 21

- Developed a plant disease identification system using AlexNet, achieving 94% accuracy.
- Enabled farmers to identify crop diseases and select appropriate pesticides, reducing crop loss by 40%.

# **CERTIFICATIONS**

- Machine Learning with python Cognitive Class.ai
- Role of Data Analyst NASSCOM

# **ACHIEVEMENTS**

- Placed 3rd in university-level hackathon hosted by the CS department for developing a campus recruitment portal.
- Secured 6th position in engineering clinics Expo for developing gas leakage detector.