# **ERROLL BARKER**

# **Software Engineer**

641-541-0683 • errollbarker1234@gmail.com • https://jr24future.github.io/ • https://www.linkedin.com/in/rr-ll-software\_

#### **ABOUT ME**

Passionate Software Engineer with 6 months of experience as a Front-End Development Team Lead. Proficient in C and Java, I have successfully developed projects including face recognition software, mobile apps, web pages, a navigation bot, databases, and ethical hacking scripts.

#### **WORK EXPERIENCE**

### Iowa State University, Endpoint - IT Support Mac Technician

10/2023 - PRESENT

- Device Management: Managed over 4,000+ Mac and Dell devices using Jamf, AWS, and ServiceNow.
- Data Backup and Handling: Conducted data backups and ensured data security during transfers.
- Hardware and Software Support: Diagnosed and resolved client hardware and software issues.

# Sigourney Area Development Corporation - Front-end Developer

07/2022 - 01/2023

- Solution Development: Collaborated with development and testing teams to create robust, scalable software solutions.
- Interface Improvement: Worked with engineers to evaluate and enhance software interfaces.
- Code Modernization: Updated legacy code to meet modern development standards.
- Project Collaboration: Communicated with management and partners on software design and project progress.

#### Walmart - Electronic Sales Associate

06/2021 - 10/2023

- Technical Support: Resolved customer technology issues over the phone and in person.
- Customer Service: Provided knowledgeable and friendly support throughout the shopping experience.

#### **PROJECTS**

# Local DeepSeek Training:

- Trained localized DeepSeek-R1 models (7B, 8B, 14B) on a personal Ubuntu server.
- Focused on natural language processing and machine learning research.
- Optimized dataset preprocessing and model fine-tuning to improve performance on specialized tasks.

# Embedded systems face recognition:

- Built a real-time face recognition and gesture-controlled camera tracking system using Python, OpenCV, and Raspberry Pi 4B.
- Integrated Pi Camera Module 3 with SG90 servos for pan-tilt tracking of a specific user's face.
- Added custom hand gesture commands for controlling camera actions, enabling hands-free interaction.

#### · Front-End Website:

- Designed and developed a responsive front-end website using HTML, CSS, and JavaScript.
- Focused on user-friendly UI/UX design, interactive features, and intuitive navigation to boost engagement.

#### Android Mobile App:

- Created a native Android application in Java featuring ChatGPT-based Al responses, real-time database connectivity, and user authentication.
- Included push notifications and clean UI/UX design, managing both front-end and back-end logic.

# • CVE-2024-30078 Webhook Exploit (Kickstarter ATtiny85):

- Researched and built an exploit for CVE-2024-30078 using an ATtiny85 microcontroller.
- Demonstrated a webhook-based vulnerability, performed penetration testing, and explored ethical hacking techniques.
- Contributed to responsible disclosure and security improvement efforts.

### **EDUCATION**

# **Bachelor of Science in Software Engineering**

Spring 2026

lowa State University of Science and Technology - Ames, IA

- Specialization in Full-Stack, Java, and C.
- · Minor in Cyber Security