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 AI 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**

Iowa State University of Science and Technology - Ames, IA

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