

# ERROLL BARKER

## Software Engineer

Ames, IA (open to relocation) | 641-541-0683 | [errollbarker1234@gmail.com](mailto:errollbarker1234@gmail.com)

**LinkedIn:** [linkedin.com/in/rr-lsoftware](https://linkedin.com/in/rr-lsoftware) | **GitHub:** [github.com/Jr24Future](https://github.com/Jr24Future) | **Portfolio:** [jr24future.github.io](https://jr24future.github.io)

Software Engineering student (Spring 2026) building React/Next.js products and Java/Android apps, with strong API integration experience (Stripe, HubSpot, OAuth). Applied AI/automation experience using OpenAI API and local LLMs on Ubuntu.

## TECHNICAL SKILLS

**Languages:** Java, C, Python, JavaScript, TypeScript, SQL, Bash/zsh

- **Frontend:** React, Next.js, HTML, CSS, SCSS, Bootstrap
- **Mobile:** Android (Java), OkHttp
- **Backend/Tools:** Node.js, REST APIs, Git, Docker, MySQL, Linux
- **Cloud:** AWS (EC2, S3, RDS); Azure (basic familiarity)
- **AI/ML:** OpenAI (ChatGPT) API, Ollama, prompt/tool integration patterns
- **Infrastructure (selected):** VMware, TrueNAS, pfSense, OpenVPN, SSH, Fail2ban

## WORK EXPERIENCE

**Iowa State University, Endpoint - IT Support Mac Technician | Ames, IA**

**10/2023 - PRESENT**

- Automated macOS workflows with Bash/zsh scripts; validated during OS releases.
- Supported Jamf Pro + ServiceNow + ASW operations across 4,000+ endpoints.
- Performed advanced troubleshooting and remediation via Terminal/local access.

**Sigourney Area Development Corporation - Front-end Developer | Sigourney, IA**

**07/2022 - 01/2023**

- Rebuilt a GoDaddy site into a custom app with MySQL + Docker.
- Migrated Angular, then to React; shipped key flows in React + Next.js + Bootstrap.
- Integrated Stripe, HubSpot CRM, and Google OAuth/Sign-In.
- Partnered with Node.js back end to validate async rendering and end-to-end flows.
- Added a customer-facing chatbot using the OpenAI (ChatGPT) API.

## PROJECTS

**JR - Personal GenAI Assistant (Python, Ubuntu Server, OpenAI API)**

**Ongoing**

- Built and evolved a personal AI assistant over 6+ years, integrating conversational responses via the ChatGPT API with an action-execution pipeline.
- Runs as a service on an Ubuntu server (also accessible via desktop VM) and automates notes, summaries, and file/folder creation for productivity workflows.
- Implements whitelist-based access control using a local database: known identities can interact; unknown users trigger an unauthorized access response until enrolled.
- Supports multi-modal interaction (face recognition, voice recognition, hand gestures) and optional Git publishing only when requested.

**Financial Companion Android App (Java, OkHttp, OpenAI API)**

**Spring 2024**

- Developed an Android Studio finance app to track personal/family finances, visualize trends, and generate goal-based recommendations.
- Implemented a ChatGPT-powered conversational UI and integrated services for stock tracking, currency exchange, and charts/graphs.
- Built a document pipeline to convert PDFs into structured data, parse outputs, and export Excel-compatible results; used OkHttp for reliable async networking.

**Secure Ubuntu Server + TrueNAS Homelab (pfSense, VMware, OpenVPN, ZFS snapshots)**

**Winter 2025 - Ongoing**

- Built a self-hosted environment on dual Intel Xeon E5-2680 v4 CPUs, 128GB DDR4 ECC RAM, and 6TB storage.
- Deployed TrueNAS with snapshot backups; hosted services such as MySQL, Git, and DNS; secured remote access using pfSense firewall policies, OpenVPN, SSH, and Fail2ban.

## EDUCATION

**IAWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY | Ames, IA**

**Expected Spring 2026**

B.S. in Software Engineering | Minor: Cyber Security

- Specialization in Full-Stack, Java, and C.

**LANGUAGES: ENGLISH (FLUENT), TURKISH (FLUENT/BILINGUAL)**