VIKASH KUMAR SINGH

Sherpur Bahori, Mahua, Vaishali (Bihar)

8409792083 | vikashkumarsingh8352@gmail.com | LinkedIn

Github | Portfolio

Professional Summary

Aspiring Java Engineer with experience in backend development, system administration, and secure authentication systems. Red Hat Certified System Administrator with a strong foundation in Java, cloud technologies, and open-source tools. Focused on building scalable, secure applications and contributing to impactful software projects.

Technical Skills

- **Programming Languages**: Java, Python, C, C++, Node.js, Kotlin
- **Cloud Platforms**: AWS, Google Cloud
- **Development Tools**: Android Development, Firebase, Postman, Docker, Git, RESTful APIs, MongoDB, Vercel, PostMan
- **Certifications**: Red Hat Certified System Administrator (RHCSA) – ID: 230-080-798, Google Cloud Developer Certified, NPTEL Certification in Operating System

Education

Arya College of Engineering and IT, Rajasthan Technical University   Sep 2021 - Apr 2025
B.Tech, Artificial Intelligence and Data Science   *Jaipur, Rajasthan*
- **GPA:** 8.1

R.N. College, BSEB   Apr 2019 - Mar 2021
Senior Secondary Education   *Hajipur, Bihar*
- **GPA:** 6.32

UMS Parmanandpur, BSEB   Apr 2018 - Mar 2019
Secondary Education   *ParmanandPur, Mahua, Bihar*
- **GPA:** 8.1

Internship Experience

Celebal Technologies   Jun 2024 - Sep 2024
RedHat Intern   *Jaipur*
- Explored Linux system administration fundamentals, including shell scripting and server configuration, leading to improved efficiency in managing server tasks.
- Configured servers and administered systems in lab environments using Git enhancing practical skills in system management.
- Gained hands-on experience with open-source tools and methodologies, contributing to collaborative projects and deepening understanding of open-source ecosystems.

Projects

Zorvik-Ai | Github   Jan 2025 - Apr 2025
Arya College of Engineering and IT   *Jaipur*
- Developed a high-performance backend using FastAPI and Uvicorn, enabling efficient processing of API requests for AI-powered chat and machine translation of pseudo language using multi-model APIs.
- Integrated Firebase Firestore for real-time storage and retrieval of chat data, prompt storage, and code snippets, ensuring seamless data management for interactive features.
- Designed and implemented API endpoints to support next-word prediction and prompt storage, optimizing backend logic for real-time AI-driven responses.

Secure Authentication System | Github   Nov 2024 - Jan 2025
- Built a secure authentication system using Argon2 hashing, JWT based login, TOTP-based 2FA, and encrypted APIs; hosted on Vercel with user data stored in Firebase.
- Implemented session handling, account recovery mechanisms, and deterministic hashing for secure, multi-device access and user privacy.
- Designed and tested RESTful APIs with Postman, logging all operational events in MongoDB for traceability without exposing sensitive data.

SecureChat   Feb 2024 - Apr 2024
- Created a real-time chat application leveraging Java and Firebase, offering seamless and anonymous user communication.
- Secured user privacy with end-to-end encryption using xsalsa20 instead of traditional AES-256, ensuring robust data protection.
- Engineered a fast, memory-efficient Android UI with custom views and input handling, ensuring a smooth user experience on low-end devices.

E-Shop (E-Commerce Application) | Github   Jan 2023 - Apr 2023

- Developed a secure and user-friendly e-commerce mobile application using Java and Firebase for real-time authentication and database integration.
- Implemented a seller verification feature allowing users to authenticate their identity before listing products, ensuring platform trust and reducing fraudulent listings.
- Integrated a payment gateway with Easy UPI Payment library, enhancing transaction security and reducing payment-related issues by 50%.