

AAYUSH SHRESTHA

aayushshres20@gmail.com | +977 9803289731 | github.com/aayushshres

SUMMARY

Enthusiastic Information Technology graduate with a solid foundation in coding, testing and software development. Experienced in app development and passionate about creating innovative solutions for complex challenges. Career aspirations include contributing to impactful projects in utility and lifestyle mobile apps, websites and software testing.

EXPERIENCE

Flutter Developer Intern

Susankya Global, Lalitpur

August 2023 – December 2023

- Developed a community-focused mobile application with Flutter, employing the Bloc state management library.
 - Engineered backend systems using Django Web Framework.
 - Integrated Khalti payment gateway using its Android SDK.
 - Wrote technical documentation for software features, streamlining onboarding for future interns and team members.
-

PROJECTS

Optical Character Recognition (Python, OpenCV, Tesseract, LLaMA-3)

Built a modular OCR pipeline for printed Nepali text using OpenCV, fine-tuned Tesseract, and LLaMA-3 for post-processing; achieved 80.3% word accuracy and outperformed standard OCR tools in structured content preservation.

Dash Blog (Flutter, Supabase)

Built a clean architecture Flutter blog application integrated with Supabase for backend services. Features include user authentication, post creation/editing, and real-time updates. Focused on scalability, UI responsiveness, and maintainable code structure.

Hisabkitab (Flutter, Clean Architecture)

Created a user-friendly expense tracker app in Flutter, designed with elderly Nepali users in mind. Implemented a fully Nepali-language interface with intuitive navigation and clean architecture to promote accessibility and ease of use.

Pixel Adventure (Flutter, Flame Engine)

Developed a 2D platformer game using Flutter and the Flame engine. Focused on character animation, physics-based movement, collision detection, and level design. Prioritized performance optimization and visual consistency across devices.

Employee Time Tracking System (MERN Stack)

Built a full-stack employee attendance tracking system using the MERN (MongoDB, Express, React, Node.js) stack. Features include admin dashboards, real-time check-in/out tracking, role-based access control, and report generation.

Hoodster (MERN Stack)

Designed and developed a responsive e-commerce web application using the MERN stack. Implemented core features such as product listings, shopping cart, user authentication, and order management. Focused on performance, clean UI, and scalable architecture.

TECHNICAL SKILLS

Full Stack Web Development

- Proficient in building responsive, scalable web applications using the **MERN Stack (MongoDB, Express.js, React.js, Node.js)**.
- Experienced with **Django Framework** for developing secure, backend-heavy applications with RESTful API integrations.
- Skilled in designing and consuming **RESTful APIs**, implementing authentication, and managing data flow across front-end and back-end layers.

Full Stack App Development

- Adept in mobile app development using **Flutter** with **Bloc architecture** for building maintainable, scalable, and reactive UIs.
- Experience developing Android applications in **Kotlin**, following **clean architecture** principles and implementing modern UI/UX design patterns.
- Integrated **Firebase** services (Authentication, Firestore, Cloud Storage, Messaging) to enable real-time updates and cloud-based features.
- Worked with **Supabase** for backend services including authentication, real-time database, and storage integration.
- Built and integrated custom **Django REST APIs** to support robust, secure, and scalable mobile backends.

Database Management

- Knowledgeable in relational databases like **MySQL** and **PostgreSQL**, with experience in schema design, query optimization, and data migration.
- Proficient in **MongoDB** for handling NoSQL data models in scalable web and mobile applications.

Other Technical Skills

- **Software Testing:** Familiar with unit testing, integration testing, and automation tools to ensure application reliability and performance.
 - **Version Control:** Extensive experience using **Git** for collaborative development, branching strategies, and CI/CD workflows.
 - **Technical Documentation:** Skilled in writing clear and maintainable documentation for codebases, APIs, and user guides.
 - **Tools and Workflow:** Proficient with development tools including **Git**, **Postman**, and **VS Code**. Experienced with basic **Docker** workflows, **Linux CLI** and efficient editing using **Vim** for fast, scriptable development.
-

EDUCATION

Bachelor's in Information Technology - Vellore Institute of Technology, Tamil Nadu, India.
2021-2025

High School (10+2) - Capital College and Research Center, Kathmandu, Nepal.
2018-2020

Secondary Education Examination (SEE) - Kathmandu University High School, Kavre, Nepal.
2018