Harsh Singh

Bhopal, Madhya Pradesh 462036 | +91 7047272436 | harshsingh704888@gmail.com

LinkedIn: linkedin.com/in/harshsingh-io | GitHub: github.com/harshsingh-io | Portfolio: harshsingh.io

PROFESSIONAL SUMMARY

Results-driven Software Engineer with hands-on experience in full-stack development, AI model optimization, and cloud-based architectures. Proven track record of enhancing system performance by 30-40% through innovative solutions and delivering scalable applications serving 100,000+ users. Skilled in Python, Java, Kotlin, Flutter, FastAPI, and AWS cloud services with expertise in both mobile and backend development.

WORK EXPERIENCE

AI Engineer | Outlier | Remote — *February 2025 - Present (Full-time Freelance)*

- Optimized multi-language code generation models for Java, Python, and Kotlin through sophisticated prompting strategies and curated training datasets of **100,000+ samples**, achieving **30% improvement** in model accuracy
- **Engineered an automated data pipeline** to process over 100,000 code samples daily, ensuring 95% data quality and directly enabling a 30% improvement in the accuracy of downstream AI models.
- Reduced language-specific errors by **40%** through implementation of cross-language optimization techniques and template-based repair strategies

Software Engineer | Persist Ventures | Remote — *November 2024 - January 2025*

- Architected scalable **FastAPI backend** with microservices architecture, implementing dual database system using PostgreSQL for structured data and MongoDB for unstructured data with **AWS S3** integration
- Developed comprehensive RESTful API endpoints for user management and AI chat interface, integrating **OpenAI API** for intelligent fashion recommendations with **40% faster response times**
- Built intuitive mobile interface using **Flutter** with BLoC pattern and Freezed for state management, implementing real-time chat and wardrobe management features achieving **99.9% uptime**

Software Engineer Intern | BlueMango Labs | Bhopal, India — *January 2024 - September 2024*

- Drove a **35% increase in user engagement** and retention for the **SuperAstro** mobile app by strategically implementing Firebase push notifications and redesigning key user interfaces to improve workflow.
- Scaled backend infrastructure to support **10x concurrent users** using AWS S3, DynamoDB, and MQTT protocol
- Developed complete expert portal with analytics dashboard and consultation management system using Flutter and FastAPI

TECHNICAL SKILLS

Programming Languages: Python, Java, Kotlin, SQL (Structured Query Language), JavaScript

Mobile Development: Flutter, Android SDK (Software Development Kit)

Backend Technologies: FastAPI, RESTful APIs, Microservices Architecture

Databases: PostgreSQL, MongoDB, Firebase Firestore, Amazon DynamoDB

Cloud & DevOps: Amazon Web Services (AWS) (S3, DynamoDB, Lambda), Firebase, Docker, CI/CD (Continuous Integration/Continuous Deployment), Git

AI & Machine Learning: TensorFlow, Keras, OpenAI API Integration, Large Language Model (LLM) Training

Architecture Patterns: Model-View-ViewModel (MVVM), Clean Architecture, Domain-Driven Design (DDD), BLoC Pattern

PROJECTS

AI Fashion Stylist Platform | **Contract with Persist Ventures** — *October 2024 - November 2024*

- Engineered full-stack AI fashion platform using **Flutter** and **FastAPI**, achieving **40% faster** style recommendations.
- **Technologies:** Flutter, FastAPI, OpenAI API, PostgreSQL, MongoDB, AWS S3, Docker, JWT Authentication

Deep Learning Fruit Analysis System | **Flipkart Grid 2024 Semi-Finalist** — *August 2024 - September 2024*

- Achieved **88% classification accuracy** using TensorFlow and VGG16 model with data augmentation and transfer learning
- **Technologies:** Python, TensorFlow, Keras, VGG16, Docker, Transfer Learning

Additional Projects: KanbanBoard (Agile task management), Passport Seva (Android app with Material Design 3)

ACHIEVEMENTS

- Led **winning team** at CodeEnergia National Hackathon 2023 among **50+ teams** with EcoSync project
- Solved **150+ Data Structures and Algorithms** problems on LeetCode, GeeksforGeeks, and Coding Ninja
- Achieved **semi-finalist** position in Flipkart Grid 2024 hackathon for Deep Learning project
- Selected as **Android Lead** for Google Developer Group-SIRT, growing membership by **500+**

EDUCATION

Bachelor of Technology in Computer Science | CGPA: 7.8/10 — *July 2021 - June 2025*
Sagar Institute of Research & Technology (SIRT), Bhopal, Madhya Pradesh