SHASHWAT RAJ

Software Developer

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in shashwatrajiitd

WORK EXPERIENCE

Software Developer (AI Infra)
Purplle.com (Manash Lifestyle Pvt. Ltd.)

May 2025 – Present   Mumbai, India

GenAI Creative Automation Platform

- **Built and deployed an autonomous multi-agent GenAI system** for large-scale creative generation across paid marketing channels (Meta, Google Ads).
- **Phase 0 – Delivered system architecture:**
  - **Ideation Agents:** Generate high-volume campaign directions and ad concepts.
  - **Generation Agents:** Produce high-fidelity static creatives via orchestrated LLM/VLM and diffusion pipelines.
  - **Moderation Agents:** Rank and filter outputs for brand compliance using vision-based evaluators.
- **Impact:** 10–15× faster creative production (1-2 weeks → < 3 hours); ~95% cost reduction (INR 1500–2000 → < INR 50 per assert); enabled 10-15× more creative variants per campaign.
- **Phase 1 – In execution:**
  - Scaling the platform to power **L1 app surfaces** (widgets, banners, category and theme-based recommendations).
  - Building a **Creative Generation Service** to remove Product team creative bottlenecks.
  - Designing an org-wide **Master Content Bank (MCB)** for structured, reusable creative assets.
- **Phase 2 & 3 – Roadmap ownership:**
  - User-level personalization and smart shuffling of widgets using personas and behavioral signals.
  - GenAI-driven PDP image and video creative automation.
  - Enforcing business logic, compliance, and brand guidelines at scale.
- **Tech stack:** Gemini, OpenAI, Stable Diffusion (LoRA fine-tuning), LLMs/VLMs, vision systems, microservices, orchestration, and MLOps.

INTERNSHIP EXPERIENCE

Software Developer Intern
Samsung R&D

May 2024 – July 2024   Bangalore, India

Real-Time Revenue Forecasting and Anomaly Detection Platform

- Developed a **real-time revenue forecasting and anomaly detection pipeline** for Samsung Ads, integrating classical regression models with transformer-based time-series architectures.
- Implemented **anomaly detection logic** on forecast residuals to flag revenue deviations in near real time, improving observability for downstream business systems.
- **Impact:** Improved revenue prediction accuracy by **5%**, reduced anomaly detection latency, and supported reliable inference under high-throughput data loads.
- **Tech stack:** Python, PyTorch, time-series ML models (Linear, Transformer), Apache Kafka, AWS (compute, storage), and distributed data processing frameworks.

ABOUT

Software Developer specializing in GenAI systems, with a strong foundation in Mathematics and Computing from IIT Delhi, focused on building scalable, business-driven AI solutions.

EDUCATION

B.Tech. in Mathematics & Computing
Indian Institute of Technology, Delhi

Oct 2021 – May 2025   Grade: 70%

High School (12th Grade)
Stephens International Public School

March 2019 – May 2021   Grade: 95%

ACHIEVEMENTS

JEE Advanced & Mains 2021
Secured 99.89 percentile nationwide among 1M + candidates

NTSE Scholar 2019
Awarded National Talent Scholarship among 1M + students

Samsung SWC Test
Qualified Samsung's Advanced Software Competency Test on first attempt

Regional Mathematical Olympiad
Received certificate of merit twice for mathematical excellence

TECHNICAL SKILLS

Programming & Systems

Python | SQL | C/C++ | AWS | JavaScript | TypeScript | DSA | GCP | Git | API Design | Object-Oriented Design | Docker | Kafka

GenAI, ML & AI Models

LLM/VLM | Diffusion Models | RAG | OpenAI | Agentic Systems | Google Gemini | LoRA Fine-Tuning | Forcasting Models