Prajeet Darda

+1 (201) 745-9455 | prajeetdarda@gmail.com | linkedin.com/in/prajeet-darda | github.com/prajeetdarda

Education

Arizona State University (ASU)   **Jan 2024 – Dec 2025**
Master of Science in Computer Science (GPA: 4.00/4.00)   *Tempe, AZ*

Indian Institute of Technology (IIT) Mandi   **Jul 2017 – May 2021**
Bachelor of Technology, Computer Science & Engineering   *Mandi, India*

Professional Experience

Topline Co., Ltd   **Oct 2021 – Nov 2023**
Software Engineer   *Saitama, Japan*

- Spearheaded the migration of a legacy **CRM monolith** to a **domain-driven microservices architecture** managing **100k+ client records**, decoupling core logic to sustain **99.99% uptime**.
- Engineered the beta launch of an **LLM-assisted response engine** with automated **PII redaction** and a **real-time sentiment pipeline** for priority escalation, reducing manual drafting effort by **50%** during pilot testing.
- Reduced complex query latency by **80% (2s to 400ms)** by engineering a high-throughput search engine using **Elasticsearch and Redis**, enabling agents to meet strict SLA targets.
- Strengthened system security with **Role-Based Access Controls (RBAC)**, encrypted REST APIs, and detailed audit logging, passing compliance reviews with **zero critical findings**.
- Accelerated release cycles by implementing **CI/CD pipelines** (GitHub Actions), enabling daily production deployments with minimal disruption in **Agile/Scrum** workflows.
- Gathered requirements from **20+ sales agents** across sales, marketing, and customer service teams, translating pain points into unified data flows that reduced call handling time by **15%** and enabled 360-degree client views.
- Enhanced **software reliability** by conducting peer **code reviews**, updating technical documentation, and increasing **unit test coverage** to **85%** using **JUnit and PyTest**, ensuring stable production releases.

Tech Stack: React, Spring Boot, Python, PostgreSQL, Redis, Elasticsearch, Kafka, AWS (EKS, S3), Docker, Kubernetes

Topline Co., Ltd   **Jun 2020 – Aug 2020**
Software Engineer Intern   *Saitama, Japan*

- Developed a **real-time call analytics platform** (Flask + Google Speech-to-Text) processing **100+ calls/day**, automating transcription, translation, and sentiment analysis to improve call handling speed.
- Delivered **NLP-powered dashboards** providing managers with real-time call quality insights, reducing feedback cycle time by **30%**.

Certifications

AWS Certified Developer – Associate DVA-C02 (View Credential)   **2025**
Amazon Web Services (AWS)

Projects

AutoCRM: Autonomous Support Agent Swarm (Live Demo)   **2025**

- Built a **Multi-Agent** autonomous ticket resolution platform using **LangGraph orchestration** and **MCP**, achieving a **90% automated resolution rate** with **40%** lower query latency via parallelized SQL.
- Implemented **Human-in-the-Loop** approval workflows for high-risk actions with **Pydantic-validated** tool schemas, preventing **hallucinated API calls** and ensuring zero financial discrepancies.

Cloud-Native Face Recognition with Deep Learning   **2024**

- Designed a distributed **face recognition system** simulating smart camera networks, where IoT devices identify faces in real time for secure, privacy-preserving analytics used across 100+ test video streams.
- Implemented a hybrid pipeline using **AWS EC2, Lambda, and IoT Greengrass** for on-device detection (MTCNN) and cloud recognition, achieving **98+% accuracy** with **sub-second latency** and reduced cloud cost by 20%.

Multimodal AI Discovery Platform (Live Demo)   **2025**

- Built a **RAG-based movie recommender** on **AWS Lambda + Vercel**; integrated **LangChain, Pinecone, and OpenSearch** for semantic retrieval, serving **1k+ daily queries** with sub-second latency.
- Engineered an **end-to-end ML pipeline** that scraped **6k+ tracks** to fine-tune **PANNs (CNN14)**; achieved **95% accuracy** in audio feature detection, powering personalized playlist generation.

Skills

Programming: Python, Java, JavaScript, TypeScript, C/C++, SQL, HTML5/CSS
Full Stack: React.js, Next.js, Node.js, Spring Boot, REST, GraphQL, PostgreSQL, MongoDB, Redis, NoSQL databases
Cloud & DevOps: AWS (EC2, Lambda, S3, CloudFront, Terraform), Docker, Kubernetes, Kafka, Git
AI/ML: PyTorch, TensorFlow, Scikit-learn, Hugging Face, Transformers, NLP, RAG, Generative AI, AI Agents, MLOps
Fundamentals: Data Structures & Algorithms (DSA), Object-Oriented Programming (OOP), System Design, Distributed Systems, Computer Networks, Operating Systems, Microservices, Unit Testing, Linux/Unix