

Shounak Dey

+91-8217241091 | dylandey1996@gmail.com | linkedin.com/in/shounak-dey | github.com/dylan007

EDUCATION

Manipal Institute of Technology

B.Tech in Computer Science and Engineering

Minor in Computational Mathematics

Manipal, India

Sep 2016 – Jun 2020

8.25/10.0

EXPERIENCE

Goldman Sachs

Bangalore, India

Vice President (Senior Software Engineer), GS Bank Technology

Jan 2026 – Present

- Built an internal MCP server in **Python** using **FastMCP** and **FastAPI**, enabling business users to self-serve functional data queries with automated analysis and graphing capabilities
- Leading end-to-end automation of Intercompany Loans and Guarantees onboarding, supporting **400+ agreements** across multiple divisions and stakeholders; built on **FastAPI**, **Kubernetes**, **AWS Fargate**, and **Aurora RDS**
- Designed and implemented a POC for self-correcting **LangChain pipeline** to automate sanctions rule generation and validation via a 4-node chain with independent test-case generation and a **3–5 retry feedback loop**, saving **3 FTE/year** in operational effort

Associate (SDE II), GS Bank Technology

Jan 2023 – Dec 2025

- Led design and delivery of a real-time **Kafka** streaming system processing **2M+ messages daily**, using KStream-KTable joins to identify cross-queue matches, with dedicated error-handling pipelines for enrichment failures and format errors
- Onboarded **10 critical services** onto an Observability Platform using **Prometheus** and SLO/SLI frameworks; designed a generalised onboarding template subsequently adopted by other teams
- Architected a full-stack UI for Central Pledge covering high-level position and loan aggregations alongside loan-level drill-down across **100k+ loans**, with row-level access controls for wall-crossing compliance; built with **React**, **Vite**, and **SpringBoot**

Analyst (SDE I), GS Bank Technology

July 2020 – Dec 2022

Seasonal Analyst, GS Bank Engineering

Jan 2020 – Jun 2020

- Developed and maintained central infrastructure to pledge securities to the Federal Discount Window and Federal Home Loan Bank, processing approximately **12 million securities daily** with automated report and dashboard generation
- Reduced processing time for a **10M+** row daily batch from **2+ hours** to under **10 minutes** by optimizing the data pipeline, significantly improving data availability for downstream consumers

PROJECTS

Auto-Trader | *Python, NumPy, scikit-learn*

November 2024

- Built an automated trading system in Python using a Random Forest classifier trained on technical indicators (MACD, RSI, Momentum); included grid-search hyperparameter tuning across look-back windows and exit thresholds
- Validated strategy via backtesting achieving a Sharpe Ratio of 0.14 against a rule-based baseline; pipeline supports rapid iteration on new signals and parameters

SLAM Bot | *Python, numpy*

July 2025

- Implemented an autonomous drone navigation system in a 2D environment with circular obstacles using GraphSLAM for simultaneous localization and mapping under noisy motion and sensor conditions
- Generated orientation-distance motion commands to reach a target object, with robust state estimation handling noise across range, bearing, and obstacle size inputs

TECHNICAL SKILLS

Languages: Python, Java, C/C++, SQL

Technologies: FastAPI, FastMCP, Langchain, SpringBoot, Kafka, React, Vite, Redis, AWS Fargate, Aurora RDS, Prometheus, Kubernetes, MongoDB, MySQL, Git

Libraries: pandas, NumPy, Matplotlib