Shiladitya Bose

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Summary

Backend engineer with 5+ years building and owning production systems end to end, most recently the infrastructure behind AI agents for a logistics automation platform. Published two open-source Python packages and active as a maintainer. Looking for a senior backend role on a small, fast-moving team working on an AI product.

Experience

Raft.ai Nov 2022 – Present
Software Engineer II *London, United Kingdom (Remote)*

- Built the shared **control plane** for AI agents, tools, knowledge bases and **MCP** servers, and orchestrated **multi-agent workflows** on **Anthropic**, **OpenAI** and **Gemini** models that execute customer SOPs, analyse documents, flag exceptions and suggest actions through chat and generative UI (**Agno AgentOS**, **AG-UI**).
- Helped re-platform to an **event-driven microservices** architecture (**FastAPI**, **Kafka**, **Faststream**) that enabled company-wide adoption of agentic workflows, shipped to **GCP** on **Kubernetes** with Helm, Terraform, ArgoCD and GitLab CI at **80% test coverage**, with observability via Grafana and Sentry.
- Designed a config-driven **ETL** engine with a declarative UI that chains source components into custom inbound data flows, hydrating a single auditable form through a Kafka pipeline before pushing it to the customer's TMS; added agents to assist with config generation from prompts.
- Built a quotes and rates platform (**FastAPI**, **PostgreSQL**, **SQLAlchemy**, **Celery**/**RabbitMQ**) implementing cost, surcharge and rebate logic from the ground up to generate any-to-any shipping quotes with full breakdowns for Toll Group and EmoTrans; cut peak memory from **8GB to 300MB (96%)** and raised XML rate-processing throughput using asynchronous Celery workers and streamed parallel parsing.
- Centralised shipment push across TMS integrations into a graph-based workflow builder that lets customers define their own workflows visually, backed by a template-driven response-parser service that maps unstructured third-party API responses onto client-defined schemas.

Tata Consultancy Services Aug 2021 – Nov 2022
Systems Engineer *India*

- Built Python automation pipelines and scheduled jobs for system administration and server-health reporting, and an interactive user management portal for a CMS backend (**Flask**, **SQLAlchemy**) hosted on Azure.

SleekSky LLC Jan 2021 – Apr 2021
Python Developer, Internship *San Francisco, United States (Remote)*

- Developed the backend for a headless CMS platform (**FastAPI**, **PostgreSQL**, **MongoDB**) deployed as **AWS Lambda** serverless functions via GitHub Actions.

Open Source

Arrest | *Python, Pydantic, HTTPX, OpenAPI* | pypi.org/project/arrest

- Type-safe declarative HTTP client with automatic Pydantic schema validation, retries, exception handling and code generation from an OpenAPI specification.

Wandern | *Python, Typer, Pydantic AI, SQLite, PostgreSQL, MySQL* | pypi.org/project/wandern

- CLI tool to create, apply and manage versioned SQL migrations, supporting SQLite, PostgreSQL, and MySQL, with LLM-assisted revision generation.

Schnell | *Rust* | github.com/s-bose/schnell

- HTTP server implemented from scratch in Rust with declarative routing, handlers and response builders.

Skills

Languages: Python, TypeScript, Go, C++, Rust, SQL
Frameworks & APIs: FastAPI, Flask, Faststream, Pydantic, SQLAlchemy, Celery, React, REST, gRPC
AI / LLM: Anthropic, OpenAI, Gemini, Agno AgentOS, AG-UI, Pydantic AI, Langwatch, Claude Code, TensorFlow, PyTorch
Data & messaging: PostgreSQL, MongoDB, ElasticSearch, Redis, Kafka, RabbitMQ
Infrastructure: GCP, AWS, Docker, Kubernetes, Helm, Terraform, ArgoCD, GitLab CI, GitHub Actions, Grafana, Sentry, Datadog

Education

University of Calcutta Aug 2021
Master of Computer Applications (MCA) *India*

- Thesis: computer vision research building a custom U-Net CNN in TensorFlow to detect brain tumours from MRI scans, achieving 70% test accuracy.

University of Calcutta June 2018
B.Sc. in Computer Science *India*