Rohan Bahl

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EDUCATION

National University of Singapore — Expected: Dec 2025

Bachelor of Computing (Hons), Computer Science (Specialisations: Artificial Intelligence & Database Systems)
- Special Programme: **NUS Overseas Colleges Toronto–Waterloo AY 24/25 Sem 2 Intake**

EXPERIENCE

Tudor Capital — May 2025 – Aug 2025

Site Reliability Engineer Intern — Singapore
- Architected a distributed alerting platform (4 microservices) using Spring Boot, ActiveMQ, and Redis to replace a legacy system, achieving sub-second UI latency for real-time management of high-volume Grafana alerts
- Reduced Grafana infrastructure management time by 99% (10 hrs to 5 mins) by architecting an Ansible and Python automation platform to manage dashboards, alerts, and configurations via the Grafana REST API
- Shipped a greenfield FIX log viewer (React, TypeScript, TanStack Table) in one sprint, cutting trade log extraction latency by 95% (60s to 3s) and eliminating legacy licensing costs

Upside Robotics — Aug 2024 – Mar 2025

Software Engineer Intern — Waterloo
- Architected a serverless AWS pipeline (Lambda, S3, DynamoDB) to ingest and process 5M+ data points per run from a 20+ robot fleet, deployed via IaC (Serverless Framework)
- Developed a real-time operations dashboard (Next.js, TypeScript) for the robot fleet, featuring Mapbox geospatial tracking and live telemetry, cutting manual field checks by 30%
- Engineered resilient firmware logic (batching, offline caching) in collaboration with hardware engineers to guarantee reliable data delivery over intermittent rural LTE networks

CUCU Covers — Jan 2024 – Aug 2024

Software Developer Intern — Toronto
- Improved marketing decision efficiency by 40% by building a Slack analytics bot aggregating Shopify, Instagram, TikTok, and Sendlane data into MongoDB and delivering automated KPI reports via Python/Flask
- Boosted backend data processing throughput by 100%+ by converting a manual order parsing and image cleaning into a automated Python pipeline with full CI/CD deployment on Vercel
- Refactored legacy modules to reduce operational overhead by 30%, enabling the launch of two new product lines (e.g., Device-skins, Wall Art)
- Decreased production incidents by 55% by debugging and shipping fixes for critical schema mismatches, API failures, and timestamp processing errors

PROJECTS

GUI Murphy, (TikTok TechJam 25) — Aug 2025 – Sept 2025

ML Engineer — Singapore

A UI identification and consistency enforcement model
- Finalist (one of 12, out of 500 competing teams)

Smart Storybook, (ETHGlobal SF 2024) — Oct 2024 – Oct 2024

Backend Engineer — San Francisco

A Web3 platform enabling creators to monetize intellectual property through NFTs
- Built a FastAPI backend integrating Pinata's IPFS API for decentralized asset storage
- Won 2nd place, Best AI Application

SKILLS

- **Programming Languages:** Python, Java, JavaScript/TypeScript, C, SQL, PHP
- **Databases:** MongoDB, MySQL, PostgreSQL, ChromaDB, DynamoDB
- **Frameworks & Libraries:** Spring Boot, FastAPI, Flask, React, Next.js, Streamlit, Serverless Framework, Laravel
- **DevOps & Tools:** Git, GitHub Actions, Ansible, Redis, ActiveMQ, Hadoop (HDFS & MapReduce), OAuth, Jinja2, pre-commit hooks, Vercel
- **Cloud & Infrastructure:** AWS (EC2, S3, Lambda, DynamoDB, Cognito, CloudWatch)