

# Rohan Bahl

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## EDUCATION

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

Expected: Dec 2025

## EXPERIENCE

**Tudor Capital**  
Quantitative Developer Intern  
• 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

May 2025 – Aug 2025  
Singapore

**Upside Robotics**  
Software Engineer Intern  
• 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

Aug 2024 – Mar 2025  
Waterloo

**CUCU Covers**  
Software Developer Intern  
• 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

Jan 2024 – Aug 2024  
Toronto

## PROJECTS

**Smart Storybook, (ETHGlobal SF 2024)**  
Backend Engineer  
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

Oct 2024 – Oct 2024  
San Francisco

## ACTIVITIES

**NUS Students for the Exploration and Development of Space**  
Avionics & Rover Team Member  
• Designed rover chassis components in SolidWorks and performed FEA to validate structural integrity  
• Contributed to the design and testing of avionics systems for experimental rocket propulsion systems

Sep 2021 – Aug 2023  
Singapore

## 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, OAuth, Jinja2, pre-commit hooks, Vercel  
• **Cloud & Infrastructure:** AWS (EC2, S3, Lambda, DynamoDB, Cognito, CloudWatch)