

# Noah Kusaba

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## Education

### Queen's University

- Bachelor of Applied Science, Mechanical Engineering (Honours, Dean's List)

Kingston, ON  
2018 – 2021

## Certifications

- AWS Certified Data Analytics/Engineering – Specialty

Aug 2023

## Experience

### Senior Software Engineer | Fetch Rewards

Charlotte, NC | Jan 2024 – Present

- Architected a DataHub governance platform with custom automated lineage crawlers across 40,000+ assets, delivering downstream impact visibility for upstream failures and enabling architectural simplification.  
*Technologies: Kubernetes, Argo, Helm, Prometheus, Kafka, ElasticSearch*
- Built enterprise-wide internal developer platform featuring cloud resource optimization framework and automated garbage collection, delivering \$1.5M in annual cost savings  
*Technologies: Svelte, TypeScript, Go, PostgreSQL, ECS*
- Developed a distributed, fault-tolerant MLOps backend with MCP context, enabling high-throughput data science evals  
*Technologies: Go, Terraform, ELB, ECS, PostgreSQL, MCP, BedRock*
- Profiled and optimized Kafka streaming processes with sensible refactors, reducing monthly operational costs by \$130K

### Senior Data Engineer | Shift4 Payments

Charlotte, NC | Jan 2024 – Jan 2025

- Championed engineering best practices including CI/CD automation (Terraform, GitHub Actions), version control workflows, and performance benchmarking standards
- Designed event-driven ETL architecture on AWS for real-time financial analytics aggregation and reporting
- Optimized legacy infrastructure achieving 96% CPU cost reduction and 1500% throughput improvement through architectural refactoring
- Implemented serverless data processing solutions using ECS, Fargate, and PySpark on AWS Glue for scalable big data workloads
- Led database migration from MS SQL Server to Redshift and modernized stored procedures to DBT Cloud, improving maintainability and development velocity

### Lead Software Engineer | Bear Cognition

Charleston, SC | Jun 2023 – Jan 2024

LinkedIn Public Referral by COO

- Led comprehensive redevelopment of internal data pipeline and processing workflows, reducing storage costs by 50% and compute costs by 60%
- Collaborated with external clients to deliver custom data integrations and software solutions for the Bear Cognition analytics platform  
*Technologies: AWS, Prefect, Kubernetes, Snowflake, GraphQL API Development, Full-Stack, Web Scraping*

### Data Engineer Consultant | Overtone AI

New York, NY | Mar 2023 – Jun 2023

LinkedIn Public Referral by CTO

- Led development of MLOps platform for processing audio news content using machine learning models for sentiment analytics  
*Technologies: Python, SQL, Docker, BigQuery, Compute Engine, Cloud Run, Container Registry*

### Lead Software Engineer | Green Pastures

Tokyo, Japan | May 2021 – Feb 2023

- Developed proprietary supply chain management platform, reducing logistics costs by 30% through automated order forecasting and shipping workflows

*Technologies: JavaScript, React, Node.js, MongoDB, Flask, Python, Go, AWS ECS, RDS*

## **Technical Projects (GitHub)**

### **Flower Image Classification Neural Network**

- Developed deep learning model achieving 96% accuracy on Kaggle dataset using PyTorch with advanced techniques including transfer learning, CutMix augmentation, progressive training, and ensemble modeling

### **C Compiler (Rust)**

- Built compiler translating C source code to ARM64 assembly with register allocation and stack frame management, compatible with Apple Silicon architecture

### **MMA Maps Event Tracking Dashboard**

- Full-stack application tracking global combat sports events (MMA, BJJ, Boxing) with interactive map visualization

*Technologies: React, JavaScript, PostgreSQL, Flask, BeautifulSoup, Selenium, Airflow, AWS EC2*

### **Customer Cohort Retention Analytics Model**

- Data warehouse implementation analyzing customer retention patterns from initial purchase through lifecycle

*Technologies: Snowflake, SQL, DBT Core, Jinja templating*

## **Technical Skills**

**Languages:** Python, JavaScript/TypeScript, Rust, Go, SQL, Shell scripting

**Frameworks:** PyTorch, Apache Spark, React, Svelte

**API Development:** REST & GraphQL (Flask, Django, Graphene)

**Cloud Platforms:** AWS, Google Cloud Platform, Microsoft Azure

**CI/CD:** GitHub Actions, GitLab CI/CD, Terraform

**DevOps:** Docker, Kubernetes (Helm, Argo), AWS ECS

**Orchestration:** Apache Airflow, Prefect, AWS Step Functions

**Other Technologies:** Data warehousing (Snowflake, Redshift, Azure Synapse), Kafka, Flink, DBT