

Lewis Smith

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Experience

Block

Senior Machine Learning Engineer, Inference and Training Team

Remote

Apr 2023 - Mar 2026

- Maintained and optimised a Go gRPC model serving service on NVIDIA Triton handling 150k average QPS across tree (ONNX) and deep learning models, abstracting deployment and infrastructure lifecycle for modelers (Go, gRPC, Triton, ONNX, Kubernetes, Docker)
- Designed batch/offline inference bulk jobs (idempotency, stuck-job detection, SLA alerting, quota-aware capacity), reducing failures 8% and MTTR 15% (Go, AWS SQS, Docker)
- Built deep learning training/tuning framework with modular configs, caching, checkpointing, distributed Optuna tuning, and batched inference support. Cut experiment turnaround from 14h to 6h across 12 teams (Python, PyTorch, Optuna, uv)
- Implemented unified ML cost attribution (standard tags, automated reports and alerts), raising cost coverage from 0% to 100% (SQL, TypeScript, AWS billing)
- Shipped LLM tracing/evaluation foundations and E2E testing for an internal admin UI (ClickHouse, Langfuse, TypeScript, Playwright)

Maxwell Plus

Lead Machine Learning Engineer

Brisbane, QLD

Jul 2020 - Apr 2023

- Published prostate cancer risk model using Gaussian Process interpolation and CNN/LSTM (<https://pubmed.ncbi.nlm.nih.gov/34920976/>). APCC 2021 poster on 3D MRI segmentation (Python, TensorFlow)
- Implemented an attention-based 3D U-Net model to segment and classify cancerous lesions in MRI (Python, TensorFlow)

Machine Learning Engineer

Jan 2018 - Jul 2020

- Built a cost-optimised distributed deep learning training system on on-demand instances, cutting training cost 70% (AWS, Kubernetes)
- Built pipelines to process and segment terabytes of 3D medical imaging data (Python, Apache Beam)
- Built and maintained asynchronous deep learning prediction endpoints (Python, Django, Celery, Docker)
- Standardised TensorFlow model development and serving via templates, tests, and coding standards (Python, Bash)

SAP Innovation Center

Software Engineer

Brisbane, QLD

Jun 2016 - Dec 2017

- Clustered time-series data to segment customers by transactional behaviour (SQL)
- Built an RNN model to predict customer churn timing from banking transactions (Python, TensorFlow, SQL)
- Optimised SQL query plans and table partitioning to improve backend performance (SQL)

Software Engineer - Intern

Mar 2016 - Jun 2016

- Generated realistic multi-million row datasets for banking transaction analytics demos (SQL, Python)
- Wrote backend unit tests for a data analytics application (JavaScript)

Education

The University of Queensland • B.Eng. (Software Engineering), 2017

Brisbane, QLD

Skills

Programming: Go, Python, SQL, TypeScript, JavaScript (ES6), Bash

ML/Infra: PyTorch, TensorFlow, Optuna, Triton, ONNX, gRPC, Kubernetes, Docker, AWS (SQS, billing), GCP

Data/Obs/Test: Redis, ClickHouse, Langfuse, Playwright

Projects

The Boxing Book React, TypeScript

<https://www.theboxingbook.com>

Global amateur boxing database used by official boxing organisations in Australia and Canada (40k+ fighters)

Awards

Most Innovative Business Idea (Startup Weekend for Health)

Mar 2016

Wearable technology for babies to track and analyse health metrics