

Sami Ansari

+1 (647) 289-6889 | SAnsari2805@Outlook.com | linkedin.com/in/samiansari99 | github.com/y0usaf

Experience

AI Engineer (Contract)

Oct 2024 – Dec 2024

Rootly, Toronto, Ontario, Canada

- Built proof-of-concept AI agent framework using RAG for automated root cause analysis of SRE incidents
- Developed end-to-end data pipeline demo integrating Rootly, Slack, GitHub using webhooks and API integrations to generate actionable ML insights
- Implemented custom chunking algorithms for processing large-scale observability data from monitoring systems

Machine Learning Engineer Intern

Apr 2024 – Oct 2024

Cohere, Toronto, Ontario, Canada

- Enhanced LLM quantitative reasoning by **3%** through development of novel fully synthetic training dataset without human annotation, becoming the **first engineer to contribute a fully synthetic dataset** to Command-R-Plus foundation model
- Created specialized evaluations for length control and adapted FinanceBench for base model assessment
- Conducted model ablation studies analyzing impact of specific datasets on cross-category performance
- Collaborated cross-functionally with evaluations, multilingual, and safety teams to generate synthetic multilingual data for model training

Senior Data Quality Team Lead

Jun 2023 – Apr 2024

Cohere, Toronto, Ontario, Canada

- Designed and deployed scalable data labeling platform with React/TypeScript frontend and Firebase/Firestore backend, processing 100,000+ tasks used by 200+ labelers, **saving \$3M in operational costs**
- Built backend data infrastructure and developed Python scripts with internal AppsScript applications analyzing tasks to extract insights for ML model improvements
- Led SFT/RLHF labeling projects and first cohort of STEM and code-focused labelers, working with external data vendors to consolidate data quality standards for post-training

Data Quality Specialist

May 2023 – Jun 2023

Cohere, Toronto, Ontario, Canada

- Delivered high-impact annotations including preference ranking, quality scoring, and SFT conversation generation across all domains
- Contributed to establishing data quality standards and annotation best practices

Technical Skills

- **Languages:** Python, TypeScript/JavaScript, SQL, C/C++, Bash, Nix
- **ML & AI:** LLM Fine-tuning, RAG, RLHF, SFT, Synthetic Data Generation, Model Evaluation, PyTorch, JAX
- **Frameworks & Libraries:** FastAPI, React, Pandas, Polars, Tailwind
- **Infrastructure:** AWS (S3, Lambda, Bedrock), Docker, Linux, NixOS, Slurm, Git, Redis, DuckDB, Firebase, Firestore

Speaking

Guest Lecturer on AI and Synthetic Data Generation for MMA Program

2024

Queen's Smith School of Business, Kingston, Ontario | 50+ graduate students

Projects

NixOS Configuration

- Comprehensive system configuration with custom development environments

Minecraft Modding

- Created modpack Samis-Randomizer for One Block worlds
- Contributor to All The Mods 10: To The Sky modpack
- Created modpacks like Samis-AE-Infinity and Expedition-33-Mods