**Dan Saunders**
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## SUMMARY

ML Engineer specializing in LLM development and deployment, with expertise in post-training and model optimizations. Experienced in creating production-ready LLM applications, contributing to open-source projects, and publishing research findings.

## EXPERIENCE

**Senior Machine Learning Engineer, Axolotl AI (11/2024 –)**
- Implemented optimizations and algorithms in open source LLM post-training library
- Led documentation / refactoring effort across codebase to improve usability / extensibility
- Mentored junior engineers in ML, open source, software engineering, etc.

**Machine Learning Engineer, Amazon Web Services (6/2022 – 11/2024)**
- Led a team to assist in humanitarian landmine detection efforts by developing an object detection system on drone imagery and geospatial data
- Boosted sales team efficiency via a scalable generative AI (LLM + RAG) chatbot solution for querying internal documentation via a natural language interface
- Improved utility of customer document database with a semantic search system with clustering, sentiment analysis, and LLM summarization features

**Data Scientist, Sensor Tower (2/2021 – 6/2022)**
- Modeled active users and retention curves for 300K+ iOS/Android apps
- Refactored model code from Ruby to ClickHouse queries, improving speed / scalability
- Built active users anomaly detection and auto-rollout of panel-based active users model

**Machine Learning Engineer, Fomoro AI (1/2019 – 2/2021)**
- Trained and deployed batch RL models that outperformed humans in agricultural machine control, deployed and iteratively improved on a 30+ machine fleet
- Developed ML ranking model that improved key engagement metrics for hiring platform

## EDUCATION

M.S. & B.S. Computer Science, B.S. Mathematics, University of Massachusetts Amherst

## RESEARCH & PROJECTS

- Contributor to [LLM post-training library](#) (8.5K+ stars)
- Published several peer-reviewed [papers](#) on machine learning and computational neuro
- Developed popular open-source [spiking neural network library](#) in PyTorch (1.5K+ stars)

## CERTIFICATIONS

AWS Certified: ML Specialty, Solutions Architect Associate & Professional, Cloud Practitioner

## TECHNICAL SKILLS

Python, Ruby, C++; PyTorch, TensorFlow, HF; CV, NLP, RL, LLMs; AWS, GCP; SQL/NoSQL