Ethan Roland

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Education

Georgia Institute of Technology - Atlanta, GA

B.S. Computer Science & Chinese Minor

- **Honors:** Magna Cum Laude
- **Extracurriculars:** AI Club, Weightlifting Club, WREK Radio Club
- **Relevant Coursework:** Machine Learning, Agile Methodologies, Databases, Data Structures & Algorithms, NLP

Shanghai Jiaotong University - Shanghai, China

Chinese Language Immersion Program, Short Course

Skills

- Strong business-focused communication skills that emphasize bottom-line impact while maintaining technical rigor
- Over 3 years of experience in Gen AI tools, including prompt engineering, LLM finetuning, knowledge graphs, & RAG systems
- More than 7 years experience in Python, Java, C, C++, and JavaScript
- Proficiency in cloud computing platforms including AWS, Azure, GCP, and Vertex AI
- Expertise in machine learning tools & platforms including SciPy, PyTorch, TensorFlow, JAX, NumPy, and Pandas
- Background in both traditional statistical analysis and neural network based approaches like Transformers and CNNs
- Proficiency in a various technologies, including HTML, Typescript, React, SQL, Docker, S3, EC2, Sagemaker, JIRA, and Tableau

Experience

AGCO Corporation, Atlanta, GA

Generative AI Team Lead, Jun 2023 - Present

- Led a team of eight to build custom industry-leading Generative AI powered software for customer support
- Owned all aspects of Generative AI application development - including ETL, cloud architecture, & frontend engineering in React
- Enabled 50% reduction in time-to-resolution for customer issues via LLM-powered RAG system for 15 million documents

Senior Data Scientist, Aug 2021 - Jun 2023

- Simplified 5 regional forecasting efforts into a one global industry demand forecast using custom time series forecasting models
- Improved combine harvester grain yields by deploying bayesian optimization techniques to machine performance

Engineering Data Analyst, Jun 2020 - Aug 2021

- Applied machine vision and NLP techniques to automate information parsing from technical documents
- Enabled more than $20 million in potential savings via automation of redundant part identification

Phonology Laboratory, Atlanta, GA

Linguistics Research Assistant, Mar 2020 - Jun 2021

- Developed neural models for speech recognition that operate within the browser to assist with foregin language education

Atlanta Tech Village, Atlanta, GA

Startup Engineering Intern, May 2017 - Aug 2017

- Architected and implemented fullstack web-app developement using Node & Angular JS, oversaw cloud service deployments

Projects

Capital One @ GT - Student Team Leader

Capstone Design project to develop a web application for Capital One employees

- Used Agile principles to lead a team of six students throughout a two semester web design project for Capital One

Fake News Detector - Term Project

Applied NLP tools to automatically detect healthcare related fake news

- Used NLP techniques to detect if a given social media post contained fake news, including TF-IDF and text classification models