

Anna Sims

sycorpia@gmail.com • www.sycorpia.xyz

EDUCATION

University of Michigan, EECS

Bachelors of Science in Engineering in Data Science

Ann Arbor, MI

Relevant Coursework: Data Structures and Algorithms, Probability and Statistics for Engineers, Machine Learning, Numerical Analysis, Integrated Product Development, Web Systems

SKILLS

Programming Languages: C++, Python, R

Databases: NoSQL (MongoDB), SQL (PostgreSQL, MySQL)

Frameworks: Django, Pytorch, Tensorflow, Apache Spark, Airflow

Cloud & DevOps: AWS, Azure, Docker, Kubernetes

WORK EXPERIENCE

XR Consultant and Lab Manager

XR Visualization Studio

Ann Arbor, MI
Oct. 2022 - Present

- Collaborated with diverse teams across academic departments to design and deploy innovative XR educational programs, empowering students to achieve deeper learning through hands-on, immersive experiences.

Research Assistant, Deep Learning

Strategic Reasoning Group

Ann Arbor, MI
Oct. 2022 - Aug. 2023

- Redesigned and modernized a trading market simulator used to test trading strategies, transitioning it from Java to Python. This update improved the efficiency and functionality of the simulator, allowing for more accurate testing and analysis.
- Developed solutions that effectively mitigated the processing speed constraints, ensuring the viability of deep hedging in real-time market environments

Quantitative Trading Analyst

Genesis Global Trading

New York, NY
June - Aug. 2022

- Developed machine learning models for parameter estimation (MoM, MLE, Bayesian), volatility forecasting (Ornstein-Uhlenbeck, Heston, Variance-Gamma), and optimal hedging strategies (Deep Hedging, neural networks).
- Researched compliance solutions for institutional DeFi and DEX participation.
- Identified hybrid-cloud architectures to optimize trading system connectivity.

Design Engineer

Nexamp

Boston, MA
Jan. - June 2021

- Designed and optimized 32 layouts, schematics, and electrical diagrams for photovoltaic power plant proposals in AutoCAD
- Performed medium voltage design work to support utility interconnection of solar power plants.

Research Assistant, Data Science

ASSET Lab

Ann Arbor, MI
June 2020 - Feb. 2022

- Co-authored academic publication "Emissions impacts of electrifying motorcycle taxis in Kampala, Uganda"
- Analyzed large emissions datasets. Built emission comparison models to compare performance of diesel and solar powered motorcycles.

Instructional Aid

University of Michigan

Ann Arbor, MI
June - Aug. 2018

- Taught weekly workshops and tutoring sessions for a calculus-based undergraduate course.

PROJECTS

Graxl, a multimodal context preserving data mask for LLMs

My DeeJay, an AI party DJ that uses computer vision to create and maintain the ideal party atmosphere

Deep Trader, algorithmic trading in real-time using Apache Flink

FELLOWSHIPS

ByteDance Innovator, *Present*
LocalHost Fellow, *Present*
Founder University, 2023
optimize SIC & Summer Fellow, 2018

COMPETITIONS

PennApps, *Wolfram Award*
HackHarvard, *Best First-time Hack*
Google x MHacks AI Hackathon, *Top 5*

AWARDS

Willie Hobbs Moore: Aspire, Advance, Achieve, 2019
MLK Student Spirit Award, 2019
Leadership Engagement Scholar, 2019