Anna Sims

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EDUCATION

University of Michigan, EECS

Ann Arbor, MI

Dec. 2024

Bachelors of Science in Engineering in Data Science

Relevant Coursework: Numerical Analysis, Probability and Statistics, Data Structures and Algorithmn, Linear Algebra, Applied

Computational Machine Learning, Integrated Product Development, VR/AR/XR Prototyping

SKILLS

Languages: C++, Python, Julia, R

Data Science & Al: Recommendation Systems, Chatbots, Computer Vision

Spatial Computing: Motion Capture, Eye Tracking Embedded Systems: PCB Design, Soldering

Design: CAD, CNC Milling, 3D Printing

Frameworks: Javascript, Next.is, Node.is

Libraries: PyTorch, TensorFlow,

Software & Tools: AWS, Unreal Engine, Blender, ARKit

Hardware & Software: Arduino, Raspberry Pi

Tools: AutoCAD. Solidworks

WORK EXPERIENCE

XR Dev and Lab Manager

Ann Arbor, MI Oct. 2022 - Present

XR Visualization Studio - Collaborated with cross-functional teams to design and implement immersive XR solutions for research projects across various disciplines.

- Provided technical support and training to students, faculty, and researchers on VR/AR development and usage.

Research Assistant, Deep Learning

Ann Arbor, MI

Strategic Reasoning Group

Oct. 2022 - Aug. 2023

- Analyzed implications of algorithmic trading on financial markets through advanced modeling techniques.
- Utilized cutting-edge deep learning frameworks and methodologies for quantitative finance applications.

Trading Analyst

New York, NY

Genesis Global Trading 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.
- Prototyped permissioned EVM subnet using Avalanche for lower-latency crypto trading.
- Identified hybrid-cloud architectures to optimize trading system connectivity.

Design Engineer Nexamp

Boston, MA

Jan. - June 2021

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

Research Assistant, Data Science

Ann Arbor, MI

ASSET Lab

June 2020 - Feb. 2022

- Co-authored academic publication "Emissions impacts of electrifying motorcycle taxis in Kampala, Uganda" under Dr. Michael Craig.
- Analyzed large emissions datasets. Built comparison models for solar electric motorcycles.

Instructional Aid, MATH 105

Ann Arbor, MI

University of Michigan

June - Aug. 2018

- Conducted weekly workshops and tutoring sessions for a calculus-based undergraduate mathematics course.
- Graded assignments, exams, and provided feedback to students.
- Expertise in explaining complex mathematical concepts and supporting student learning.

FELLOWSHIPS & AWARDS

LocalHost Fellow, Present Founder University, 2023 optimize SIC & Summer Fellow, 2018 Willie Hobbs Moore: Aspire, Advance, Achieve, 2019 MLK Student Spirit Award, 2019

Leadership Engagement Scholar, 2019