# Sai Meda

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### **EDUCATION**

Purdue University – West Lafayette, IN

B.S in Computer Science - Artificial Intelligence, Applied Statistics

**Minor:** *Psychology and Mathematics* 

• Presidential Scholar: Recognized based on exceptional academic performance and leadership contributions

Relevant Coursework: Data Engineering in Python, Algorithmic O-O Programming, Discrete Mathematics, Linear Algebra

Activities: Financial Management Club, Asian American Alliance, Data Mine, Purdue Solutions Consulting, VIP

### **EXPERIENCE**

### Purdue Solutions Consulting – West Lafayette, IN

August 2023 – Present

• Selected as one of 15 individuals out of a pool of 200+ applicants to provide third–party solutions to address business problems **DigitalNext** - Warren, NJ

Cybersecurity Consultant

January 2024 – May 2024

- Developed an integrated sales strategy, leveraging data analytics and cybersecurity portfolio to drive sales growth by 75 percent
- Conducted comprehensive market analysis identifying emerging AI cybersecurity markets and potential client cyber needs **CES Nationwide** Hodgkins, IL

Technology Consultant

August 2023 – December 2024

- Derived a new SKU and item class system based off current industry practices by parsing through over 4000 items of inventory
- Coordinated with needs of CES staff and vendors on an efficient way to reorganize product IDs for future order processing

### Artificial Intelligence in Music - Elmore School of Electrical and Computer Engineering

Machine Learning Researcher - PI's: Lu Yung-Hsiang and Kristen Yeon Ji-Yun

January 2024 – Present

- Conducted research on machine learning and robotics literature to engineer a robot with 6 degrees of freedom to play the cello
- Collaborated on developing a supervised learning environment with a robotic arm as the agent and sensors for the environment
- Trained RL algorithm with a recurrent neural network to fine tune algorithm and incorporate deep Q\* learning for the values

# **The Aerospace Corporation** – El Segundo, CA (Remote)

Full Stack Engineer

January 2024 – May 2024

- Developed an application using Plotly, Pandas, and Flask, simulating telemetry data that enhanced visualization efficiency by 40%
- Orchestrated a SQL database capable of managing, which streamlined user interactions, improving file processes by 30%
- Leveraged real-time telemetry data with a Kalman filter to reduce errors, leading to a 75% reduction in interference in data

# Microsoft (Minecraft) - Redmond, Washington (Remote)

Data Engineer

August 2023 – January 2024

- Enhanced Twitter sentiment analysis tools, resulting in a 50% increase in data processing speed of 10,000+ tweets per day
- Refined data extraction pipelines, automating the storage of large datasets which reduced manual data handling time by 75%
- Applied LDA to analyze over 5,000 YouTube comments and implemented BERT achieving 89% accuracy for sentiment analysis

#### Crazy4Crayons – Carmel, IN

Founder

August 2022 – May 2023

- Established an organization to create equitable access to education, resulting in a total of \$1590 raised and over 800 supplies
- Spearheaded a large-scale community giving project for Carmel DECA, coordinating an operation with more than 50 participants

### **PROJECTS**

### MountainCarRL - Python, OpenAI Gymnasium, NumPy, Matplot

- Implemented an efficient reinforcement learning model using Q-learning to solve the classic Mountain Car problem
- Integrated Python-based machine learning libraries such as NumPy and Gym, while visualizing the agent's learning progression

#### Social Zoom - Java, GUI, NetworkIO, File-IO

- Developed a social media platform in Java with a smart news feed, while achieving real time updates and reduced latency
- Implemented scalable micro-services architecture to support real-time user interactions, content sharing, and data processing

# **Lock Free Order Book** - C++

- Engineered a high-performance, lock-free order book in C++ for financial securities utilizing atomic operations for fast execution
- Managed over 10,000 concurrent buy/sell orders without traditional locking mechanisms, reducing latency by 40%

### TECHNICAL SKILLS

Programming Languages: Python, Java, R, Javascript, C++, HTML, SQL

Tools/Frameworks: Word Press, Pandas, Matplot, Git, Tensorflow, Orekit, Pytorch, Flask, React, Numpy

Certifications: Microsoft Azure AI Fundamentals, Microsoft Azure Data Scientist Associate, Duke AI Product Management

December 2026