

Jenna Sayle

saylej@miamioh.edu | (440) 321-9896 | Oxford, OH | <https://www.linkedin.com/in/jenna-sayle/>

EDUCATION

Miami University

August 2019 – August 2023

Bachelor and Master of Science in Engineering, Computer Science, GPA: 3.45, 3.47

Oxford, OH

- Relevant Coursework: **Artificial Intelligence**, Advanced Machine Learning, Advanced Cryptography, Advanced Image processing and Visualization, Quantum Computing, Algorithms and Data Structures, Programming Systems, Distributed Systems, Discrete Mathematics, Operating Systems, Web Application Programming, Database Management Systems, Machine Learning, Advanced Data Visualization, Graphics, Game Engine Design, Comparative Programming Languages, Experimental Design, Applied Statistic Modeling.

Miami University

August 2023 – (Expected) May 2024

Master of Science in Business Analytics, GPA: 3.68

Oxford, OH

- Relevant Coursework: Intro to statistical modeling, Statistical Modeling and Design, Business Intelligence and Data Visualization, Managing Big Data, Introduction to Data Mining in Business, Communicating with Data.

EXPERIENCE

Amazon

May – August 2023

Software Engineer Intern, Audience Metrics and Transparency, Amazon Ads

Boulder, CO

- Created a **Full Stack Application** for the use of the internal Targeting Org and its customers to facilitate alarming operations.
- Worked in an extensive backend package to create **new API functionality** at new, **secure endpoints**.
- Provisioned and hosted the Application internally with an Authorization and Authentication scheme in a **React** Package.

Amazon

May – August 2022

Software Engineer Intern, Targeted Advertising, Amazon Ads

Boulder, CO

- Created a daily workflow for **Unused Audience Detection** to allow for processing time optimization in the targeted advertising workflow. Deployed rule-based approach to Beta and began testing a Machine Learning predictive approach. Projected to save **hundreds of thousands** of dollars on daily runtime costs once audiences identified by this system are deleted.
- All Infrastructure involved was created with a focus on scalability through code via a Cloud Development Kit package.

Amazon

May – August 2021

Software Engineer Intern, Tag Policy, AWS Platform Identity

Seattle, WA

- Created a new workflow for **Tag Compliance Report Generation** using service APIs to reduce latency of report generation and the staleness of compliance data for AWS customers by **26%** according to Cloud Watch metrics.
- Separated workflow for my team's compliance report generation so it no longer depends on another team.
- Focused on efficiency, frugality, and scalability, and optimized via **Elastic Map Reduce** services.

INVOLVEMENT

Women's Cross Country and Track and Field

August 2019 - Present

Student Athlete

Oxford, OH

- Dedicate 20+ hours per week to practice, race traveling, strength and conditioning, and team meetings while maintaining a full academic course load. (Running on average ~50 miles per week)
- Placed 7th at the 2023 MAC Outdoor Track and Field Championships in the Steeplechase.

PROJECTS

- Student Churn Prediction** Using Miami University datasets, clean, balance and format historical data to train a XGBoost classifier to predict whether student in the ISA major, minor or thematic sequence will drop in the future. The model achieved an accuracy of 0.92 and a recall score of 0.74. This model will be used by Miami Farmer School of business administration to predict class sizes for the ISA courses.
- Detection of Medical Malpractice** Working alongside Dr. Jay Shan as a paid research assistant to gather data to train an **Artificial intelligence** model to detect six different types of medical malpractice via patient reviews posted online.

SKILLS

- Programming:** Java, Python, Type Script, C++, R
- Web Development:** React, JavaScript, PHP, SQL, HTML, CSS
- AWS:** Cloud Development Kit, Elastic Map Reduce, Lambda, S3, Dynamo DB, Simple Notification Service, Step Function, Cloud Watch Event logs and Event rules, Harmony, API Gateway, VPC, AWS code Pipeline
- Artificial Intelligence and Machine Learning:** Pandas, sklearn, Hadoop, git, tidyverse, TensorFlow, Spark