# Madeline Spawn

520-345-2322 | madelinespawn@gmail.com | linkedin.com/in/madeline-spawn | github.com/mn-spawn

# EDUCATION

Oregon State University
Master in Artificial Intelligence

September 2023 – June 2025

Corvallis, OR

**Oregon State University** 

September 2022 – June 2024

Bachelor of Science in Computer Science

Corvallis, OR

#### EXPERIENCE

## **Graduate Teaching Assistant**

September 2024 – Present

Oregon State University

Corvallis, OR

• Collaborated with faculty to hold office hours, graded assignments, and provided academic support to over 70 students.

## Information Technology Student Support Specialist

November 2022 – Present

Oregon State University

Corvallis, OR

• Provided expert technical support by efficiently handling incoming calls and tickets, troubleshooting diverse software and hardware issues to ensure smooth IT operations, while leveraging strong communication skills to diagnose and resolve problems.

# Software Development Engineering Intern

June 2024 – August 2024

McDonald's

Chicago, IL

• Developed a full stack application using React.js, .NET backend, and REST APIs to optimize data retrieval in several development environments for several markets.

# Artificial Intelligence Research Assistant Intern

June 2023 – November 2023

Keywords Studios

Remote

• Optimized AI model performance by refining prompts based on feedback, collecting and curating training data, and collaborating with research and engineering teams to implement and validate model enhancements.

#### Current Research Projects

#### Artificial Intelligence Research

September 2024 – November Present

Oregon State University

Corvallis, OR

• Currently researching under Karthika Mohan on causal inference's application to Artificial Intelligence, Machine learning and Deep Learning

#### Development Projects

### Urban Noise Prediction from Aerial Imagery

September 2024 – Present

• Currently developing a multi-modal approach to integrate GIS data with high-resolution aerial imagery for urban noise prediction.

#### College of Business AI Chatbot

March 2024 - June 2024

• Developed a fine-tuning script and implemented a retrieval-augmented generation (RAG) approach, including vectorization and pipeline integration.

## LSTM-NN for Traffic Prediction During Wildfires

January 2024 – March 2024

• Developed an LSTM neural network model using high-resolution data from the Caltrans Performance Measurement System to predict traffic patterns.

#### TECHNICAL SKILLS

Languages: Python, C, C++, C#, SQL, JavaScript, HTML/CSS, R

Frameworks/Libraries: Node, React.js, Pytorch, Keras, TensorFlow

Tools: Git, Github, VS Code, Visual Studio, Jet Brains IDE's (PyCharm, Rider, CLion), Google Colab, Jupyter

Notebook, LaTex, Huggingface

Data Analysis/Visualization: Pandas, NumPy, Matplotlib, Seaborn