NICHOLAS LAUREANO

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EDUCATION

University of Oregon | Eugene, OR | GPA: 4.10 | Expected Graduation Winter 2026 (March)

B.S. Computer Science, Minor: Mathematics and Earth Sciences

Specialization Coursework: Software Engineering, Statistical Models & Methods, Linear Algebra, Modeling & Simulations, Machine Learning, Mathematical Cryptography

RELEVANT WORK EXPERIENCE

Microsoft: *Software Engineer Intern* 06/2025 – 09/2025 (Ongoing)

- Designing and implementing a long-haul testing suite for Azure's multi-cluster Fleet Manager system to simulate real-world customer workloads and uncover regressions over extended durations.
- Developed provisioning, workload deployment, upgrade/downgrade, and application migration tests, now integrated into perpetual CI/CD pipelines to ensure continuous validation of service reliability.
- Authored distributed, long-running Kubernetes test scenarios in Go to detect deployment drift and spontaneous regressions in canary builds—boosting pre-production testing coverage by ~30%.
- Gained hands-on experience with cloud-scale infrastructure, distributed system testing, and service resiliency practices in a Cloud-native environment on Azure.

RELEVANT PROJECTS

Seismic Event Classification on Neural Networks || Tech Stack: Pytorch, Matplotlib, ML/DL || GitHub

- Built a **convolutional neural network** (CNN) to classify multichannel seismic waveform data into 4 categories: Noise, Low, Medium, and High magnitude earthquakes.
- Conducted **hyperparameter tuning** over 8 configurations (learning rate, weight decay), utilizing **CUDA GPU acceleration** and custom time-tracking utilities.
- Achieved **74.76% overall accuracy** and **84.53% binary accuracy** (Earthquake vs. Noise) on held-out test data.
- Created reusable training, evaluation, and plotting pipelines; contributed thorough documentation and visualizations for reproducibility.

Yummers: A Restaurant Decision Making App || Tech Stack: Flutter/Dart, Flask, MySQL

- Built a Full-Stack mobile app to help couples and groups choose restaurants effortlessly.
- Developed cross-platform capabilities using **Flutter/Dart** for iOS, Android, Web, Windows, and Mac from a single codebase.
- Designed and deployed a **Flask REST API** with a cloud-hosted **MySQL** database to handle user requests and securely store preferences.
- Focused on an intuitive user experience, backed by detailed system design and documentation.

Pandemic Simulator || Tech Stack: Python, TKinter, NumPy|| GitHub

- Designed and developed an interactive global infection **simulation tool** with **real-time visualization**, incorporating country-specific factors such as population, Human-Development-Index (HDI), and geographic connections.
- Engineered a **probabilistic infection spread model** that accounted for virulence, HDI-based response effectiveness, and geographic proximity, enabling realistic simulations.
- Built a **dynamic user interface**, featuring simulation controls, detailed infection statistics, and responsive world map **visualizations**.

SKILLS & AWARDS

Python (Matplotlib/NumPy/Tkinter/Flask/Pytorch), Kubernetes, Go, C/C++, Git/GitHub, SQL, UNIX/Linux,

University of Oregon Dean's List – 5 (of 5 Potential Terms) Time Recipient – F23, W24, S24, F24, S25