Alexandre R. Sathler

Junior ML Engineer

(503) 545-1236 Portfolio LinkedIn Github

Aspiring machine learning engineer with three years of experience at national labs and in industry.

TECHNICAL SKILLS

Programming Languages | Python • C++

Tools | TensorFlow • Pytorch • Sklearn • TensorRT • ONNX • HPC • Slurm • Jupyter • Vertex AI • Lightning AI • BigQuery • Matplotlib • Seaborn • NumPy • Qt

Domains | AI • Machine Learning • Computer Vision • Data Analysis • Data Visualization

EXPERIENCE

Phi Optics Inc. – **Computer Vision Researcher** (Chicago, IL) May 2024 – Present

- On workstations and in the cloud, trained Detectron2 instance segmentation models for CellVista-AI cellular analysis software.
- Processed, curated, and analyzed image datasets for model training and testing.
- Developed UX integration for machine learning deployment.
- Enabled real-time biological insights for customers and attracted investment.

National Institutes of Health – **Computer Vision & Neurobiology Research Fellow** (Bethesda, MD) August 2022 – April 2024

- On HPC systems, trained InceptionV3 models for cell image segmentation achieving 96% pixel classification accuracy and >85% segmentation IoU.
- Pre-processed and manually annotated microscope images for model training and testing.
- Facilitated biological insights accelerating neurodegeneration research.

Oregon State University – **Image Analysis & Biochemistry Research Assistant** (Corvallis, OR) Dec 2020 – June 2022

- Developed a 3D image normalization and visualization pipeline for biological insights.

Earle A. Chiles Research Institute – **Bioinformatics Intern** (Portland, OR) Dec 2020 – June 2022

- Developed a CSV processing pipeline for genomic data insights.
- Validated a genome-based quality control method for personalized cancer treatment in the nation's 11th largest health system.

EDUCATION

Oregon State University – **B.S. Biochemistry & Molecular Biology** | June 2022
Minor: ***Biological Data Science***

Udacity – **Nanodegree. Machine Learning with Tensorflow** | Aug 2020