Zeyad Shureih

Machine Learning Engineer with 3 years of experience open to new opportunities in the AI/ML space. Extensive experience in computer vision, with exposure to natural language processing, robotic control, and generative modeling.

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Hillsboro, OR

Professional Experience

Machine Learning Engineer — November 2023 – Present
Buzz Solutions Inc. — Remote

- Designed, implemented and maintained an experiment cataloging service that is used to reproduce training results and facilitate active learning.
- Collaborated with teammates in and outside the U.S. to deploy and verify ML models running both on the cloud and on edge devices.
- Modified YoloV8 architecture to support outputting and learning from embeddings, custom class weighting, and determination of model uncertainty.
- Presented and explained experimental results to clients during POCs, communicating model performance and trade-offs to secure new contracts.

Machine Learning Engineer — March 2022 – November 2023
MiCROTEC (formerly Lucidyne Technologies, Inc.) — Remote

- Delivered fine-tuned semantic segmentation models to clients around the world.
- Collaborated with an international team to develop tools and implement model architectures in our shared backend.
- Lead special projects in data generation with GANs and reduced training time by up to 70% with multi-GPU and distributed training implementations.
- Mentored two interns through their own projects on regularizing for domain drift and semi-supervised classification problems.

Graduate Research Assistant - AI Software Engineer — January 2021 – June 2022
Oregon State University — Corvallis, OR

- Developed intelligent agents to solve complicated computer vision and physical reasoning problems designed and evaluated by DARPA researchers.
- Delivered a top scoring physical hypothesis generator (2021) that recreates observed objects in a physics engine to predict object dynamics.
- Developed a novel method for classifying and reasoning about object trajectories from 2d imagery in 3d space.
- Presented and defended research to a panel of experts.

Publications

- **“Solving Physical Reasoning Problems in Simulated Environments,”** Oregon State Honors Thesis, 2021
- **"Identifying Reasoning Flaws in Planning-Based RL Using Tree Explanations,”** CHASE, 2021
- **“VIVA: Visual Exploration and Analysis of Videos with Interactive Annotation,”** IUI, 2023

Education

Oregon State University
Master of Science, Artificial Intelligence

Oregon State University
Honors Bachelor of Science, Computer Science

Proficiencies & Interests

Languages
- Python (3 years)
- Javascript (2 years)
- PostgreSQL (1 year)

Tools
- PyTorch
- NumPy
- Pandas
- Docker
- Jenkins
- Git
- Linux
- GCP
- OpenCV
- OpenAI Gym
- ROS
- PyBullet

Interests
- Tabletop roleplaying games
- Computer hardware
- Home Networking Solutions

Personal Projects

- **DungeonRL** - D&D 5e based Gym Environment
- **MOVA** - Multimodal music video generator based on BindDiffusion
- **PVE-Dungeon** - Home server hosting VMs for streaming/processing of D&D games
- **Characterize** - Generating Printable Tabletop Minifigures from Text