Govind Pimpale

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Education

University of California, Los Angeles Exp. Fall 2024 | GPA: 3.874

Major: B.S. Computer Science and Engineering

Coursework: Data Structures, Programming Languages, Operating Systems, Linear Algebra, Distributed Systems, Computer Network Fundamentals, Compiler Construction, Machine Learning, Statistics

Technical Skills

Languages: Python, C++, Rust, Java, Javascript, Typescript, SQL, CUDA
Technologies: PostgreSQL, Spring Boot, ReactJS, Nginx, Vulkan, Express.js, WebGL, Flask, OpenAI API
Developer Tools: Git, VS Code, AWS, PyCharm, Jupyter Notebook, Docker, Linux

Experience

Machine Learning Researcher August 2023 – Present

Visual Machines Group | visual.ee.ucla.edu *Los Angeles, CA*

- Designed and implemented a neural network to predict gaze direction using pictures of the eye from inside a virtual reality headset. The model achieved a total angular error of only 0.85 degrees.
- Conducted research on using gaussian splatting to automatically create convolutional neural network (CNN) layers for 3D data.

Machine Learning Researcher August 2023 – Present

Bolei Zhou Lab | boleizhou.github.io *Los Angeles, CA*

- Designed and trained an inverse dynamics model (IDM) to predict car steering input from velocity data. Used the IDM to create an offline reinforcement learning dataset, and benchmarked offline RL algorithms on the dataset.
- Collaborated with Prof. Bolei Zhou on a sequence of RL tutorials to teach students policy gradients, deep Q-Networks, TRPO, and PPO using the Metadrive environment. (github.com/pimpale/mdt)

Software Engineering Intern June 2023 – Sepetember 2023

Lacework | lacework.com *Mountain View, CA*

- Created an in-app customer support tool that interfaces with Zendesk to automatically create tickets based on user reports. Collected requirements for the tool from various stakeholders, creating a product requirement document. Designed and implemented the tool using React, Java, and Dropwizard.

Software Engineering Intern July 2022 – Sepetember 2022

Alignment Research Center | alignment.org *Berkeley, CA*

- Implemented part of the front end UI to interact with large language models in order to determine if the models display harmful behavior.
- Designed and implemented a synchronization system to propagate updates between clients using WebSockets.

Software Engineering Intern July 2022 – Sepetember 2022

Atlas Fellowship | atlasfellowship.org *Berkeley, CA*

- Implemented a Discord bot to allow participants to make bets using Manifold Markets (manifold.markets).
- Created an online tournament platform for people to compete Python bots that play iterated prisoner's dilemma. Used Postgres, Rust, and React.

Activities

President | AI Safety Club at UCLA August 2022 - Present

- Founded and managed a research-focused club on the topic of AI safety, which grew from 0 to 70 registered members in less than a year.

Project Lead | Bruinspace (CubeSat club) December 2021 - June 2022

- Developed control software (C++) for a CubeSat handling attitude control, telemetry and data collection.