Leo Chen

EDUCATION

Purdue University, West Lafayette, Indiana

Aug 2021 – December 2024

Bachelor of Science in Computer Engineering

GPA: 3.5/4.0

Relevant Coursework: Artificial Intelligence, Remote Sensing, Software Engineering, OOP C++, Data Structures, Compilers, Optimization

EXPERIENCE

IEEE X Purdue Low Power Computer Vision Challenge (Seris/Cam2)

May 2023 – May 2024

Research Co-Team Leader

- Served as **lead author** for the **research paper** "2023 Low Power Computer Vision Challenge (LPCVC) Summary", available at: https://arxiv.org/abs/2403.07153.
- Managed web server via GitHub CI/CD, connected to Jetson Nano over ethernet-exclusive ssh for the execution of model evaluations available at: https://lpcv.ai.
- Hosted an online competition focused on optimizing computer vision segmentation models for edge devices, attracting 117 participants, yielding 475 valid submissions.
- Created an automatic evaluation system measuring inference time via standardized output, leveraging CUDA.

Acuinas

Jun. 2021 – Aug. 2021

R&D Software intern

- Employed XGBoost AI model to forecast the likelihood of musical success, providing actionable insights for musicians and aiding investors in identifying upcomers.
- Coordinated with a diverse team of 13 specialized interns via weekly standups and Slack.
- Curated and refined datasets sourced from online databases, filtering to ensure integrity of collected data.

UnityisStrength

Jul. 2024 – Aug. 2024

Website designer

- Redesigned header/footer and added/redesigned multiple pages. https://unityisstrength.io/
- Implemented appointment system taking into account planned breaks, vacations, and working hours
- Added Donor Advised Fund Widget to simplify donation process.

PROJECTS

Basketball Form Analysis App:

- Developing specialized volov8 CV model for exclusively tracking humans, basketballs, and hoops.
- Utilized ec2 cloud computing instance with GPU to accept video then return animated pose video.
- Collected and combined data from multiple videos or multiple shots in one video.
- Managed input and output system of android app developed via flutter.

Trustworthy Module Registry:

- Lead development of portable Dart-based CLI executable for evaluating NPM modules based on trustworthiness via NPM or GitHub URLs.
- Created UI hosted on GitHub Pages with CI/CD, AWS Lambda backend and S3 for data storage.
- Utilized OpenAI API to curate suggestions based on user input, GitHub/NPM API for measurement.
- Managed GitHub Organization, setting permissions for specified branches and individuals.

Unreal Engine Simulation:

- Lead development of Unreal Engine AI NPC simulated movement through various landscapes.
- Pioneered heatmap system to collect and output data of NPC movement.
- Handled multi-story navigation mesh.

Skills

- Programming Languages: Python, C/C++, MATLAB, Java, JavaScript/TypeScript, Dart
- Fluent Languages: English, Chinese