

Company name: Aditi Consulting

Link: https://www.linkedin.com/jobs/search/?currentJobId=3812507357&f_E=2&keywords=computer_vision&origin=JOB_SEARCH_PAGE_JOB_FILTER&start=25

mission: The main function of a computer vision engineer is to explore, develop and deliver new cutting-edge technologies that serve the foundation of optical computing. The typical computer vision engineer will be a software engineer with a deep C++ skillset and possess the ability to solve challenging computer vision and image processing problems.

Company name: Together AI

Link: https://www.linkedin.com/jobs/search/?currentJobId=3744959045&f_E=2&geoid=103644278&keywords=software_vision&location=United_States&origin=JOB_SEARCH_PAGE_SEARCH_BUTTON&refresh=true

mission: As a Systems Research Engineer specialized in GPU Programming, you will play a crucial role in developing and optimizing GPU-accelerated kernels and algorithms for ML/AI applications. Working closely with the modeling and algorithm team, you will co-design GPU kernels and model architecture to enhance the performance and efficiency of our AI systems. Collaborating with the hardware and software teams, you will contribute to the co-design of efficient GPU architectures and programming models, leveraging your expertise in GPU programming and parallel computing. Your research skills will be vital in staying up-to-date with the latest advancements in GPU programming techniques, ensuring that our AI infrastructure remains at the forefront of innovation.

Daehyun Cho

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EDUCATION

University California, Irvine

B.S. in Computer Science Artificial Intelligence Specialization

Irvine, CA

Expected June 2024

PROJECTS

Facial expression detection

June 2023 - October 2023

Project-leader

- Group of 3 project to create a model to detect user's facial expression
- Using tensorflow to build Convolution Neural Network model with numpy and open-cv to data preprocessing
- Increase accuracy by reducing overfitting with adjust hyper-parameter

EmojiDetect

December 2023 - February 2024

Team-leader

- Capture webcam frame to detect object and convert it to emoji
- Use YOLOv8 with SAM model to make segmentation masks and training data
- Create custom dataset and ImageNet dataset to train model with annotations
- Applying motion detection to detect more various set of emojis such as waiving hands

Gradient Domain Editing

December 2023 - January 2024

Project-leader

- Using gradient domain to put source image onto target image with masking
- Use Gaussian blur to smooth the mask
- Reconstructing an image that has that new set of gradients as they come from two sources

Traffic sign/ driver drowsy detector

June 2023 - October 2023

Project-leader

- Train model with traffic sign dataset to detect traffic signs from live dash-cam video
- Deploy drivers' drowsiness/distraction score that can monitor drivers' attentions

ACTIVITIES

AI@UCI Club | *Programmer/Developer*

June 2022 – Present

- Developed AWS DeepRacer student league model by implementing reward function of reinforcement learning
- Analyze data from FYM industry company with pandas and matplotlib to track data visualization

AI Innovation Challenge | *Team-leader/Developer — Finalist*

October 2023 - January 2024

- Created AI model that can substitute traditional survey with live-time engagement scoring system
- Built custom dataset and scoring function to generate results
- Deploying stable model with live pitch presentation for entrepreneurs

TECHNICAL SKILLS

Languages: Python, C, C++, Java, SQL, R, HTML/CSS, x86 Assembly, HTML

Frameworks: Tensorflow, Pytorch, FastAPI

Developer Tools: Git, Docker, Google Colab, Jupyter Notebook, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

Libraries: pandas, NumPy, Matplotlib, openCV, Scipy