

LIJUN CAI

(413) 466-1314 | lijunca@umass.edu | linkedin.com/in/lijunca | lijunc04.github.io

Education

University of Massachusetts Amherst

B.S. in Computer Science

Sept 2023 - Dec 2026

Amherst, MA, USA

- **Chancellor's Award:** \$18,000 p/a
- **GPA: 3.954**
- **Relevant Coursework:** Machine Learning, Computer Vision, Mobile Health Sensing, Programming Methodology, Artificial Intelligence, Computer Systems, Discrete Math, Linear Algebra...

Experiences

AI Camera Team, Huawei Technologies Japan | *DL, CV, PyTorch*

May 2024 - Aug 2024

Intern, On-site

Tokyo, Japan

- Optimized Adapted state-of-the-art deep learning models to optimize performance for specific computer vision tasks
- Optimized neural networks using PyTorch to enhance image processing capabilities, improving model efficiency by **50%** and contributing to better image output.
- Gained hands-on experience working in Huawei's internal ModelArt cloud environment, supporting large-scale AI model training and deployment.
- Improved problem-solving and technical skills through real-world applications of machine learning in a fast-paced, collaborative team environment.

Skills

Areas: Machine Learning, Computer Vision, Web Development (Frontend/Backend)

Programming languages: Python, JavaScript (TypeScript), C, HTML, CSS

Frameworks & Tools: PyTorch, OpenCV, Git, React, Expo, MongoDB, Flask

Projects & Awards

"LendIt" Web App, HackUMass Hackathon XI | *React, MongoDB, Auth0*

Nov 2023

Awards: *Wolfram Alpha Letter Award (top 7 out of ~90), Best Sustainability Design*

- Designed and programmed a React web app for university students to loan out and borrow items to save money and improve sustainability on campus.
- Developed working user system with Auth0, as well as using MongoDB for backend database and connecting it with React & SCSS frontend.
- Used Git workflow in a group of 4 for backend and frontend development.

"Acaredemy", Conrad Innovation Challenge | *PyTorch, OpenCV, Python*

Jan 2022

Awards: *Chinese Division Silver Medalist (total ~30 teams)*

- Designed a facial recognition system to improve online class quality and a violence recognition system to combat school bullying.
- Involved training and adjusting a facial recognition model and a violence detection model for real-life video use, achieving an overall accuracy of **85%**.
- Deployed model on self-developed website for real-time detection demo on camera stream.

Extracurriculars

UMass Amherst Chinese Students and Scholars Association (CSSA)

Sept 2023 - Present

Treasurer

- Managed a budget of approximately \$5,700 in expenditures, while securing \$7,000 in sponsorship revenue, resulting in a surplus and ensuring the successful execution of multiple high-profile events.
- Leads ~20 people, organizing activities such as online gaming competitions, Chinese festival celebrations, planning social media posts, and sponsorship events.