

更改日志

20250219

1. Refactor Layout

20250123

1. 添加 personal website, remove youtube

20250107

1. 修改姓名字号 from 20
2. 添加 location
3. Polish by GPT with the prompt: First, imagine you are a staff-level software engineer in computer vision and robotics and the hiring manager. Polish this for an entry-level to be professional and concise on resume. Then, bold the highlight word that you feel the most awesome, highlights should not be too much

20250104

1. 修改经历时间, 删除月份
2. Skillset moves to the bottom and make it white
3. Remove 每个 experience 下的单独行 skills

Yunzhe Jonas Li

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EDUCATION

University of California, Berkeley

2024-2025

M.ENG., Electrical Engineering and Computer Sciences in Robotics. GPA: 3.85/4.0

Related Coursework: 3D Computer Vision, Deep Learning for Computer Vision, Introduction of Robotics, Data Science, Agentic LLMs

Shanghai University

2020-2024

B.ENG., Computer Science. Rank: Top 1. GPA: 92.59/100

WORK EXPERIENCE

Momenta

2024

Software Engineer Intern | Shanghai, China

- Delivered the first version of the **reversing feature** for **GM Cadillac Lyric** autopilot, covering the **full product lifecycle**
- Developed a clustering algorithm to detect stuck states in autonomous vehicles, boosting **recovery performance** by **3%** across 800+ real parking test cases in 30+ garages within 4 months
- Designed a checker to identify prolonged braking stops, achieving **98% accuracy** in detecting stuck states and reducing false positives by 15%, improving simulation reliability for 15,000+ events
- Slashed** the product manager's **workload** from 120min/day to 20min/day through automating the advanced data processing for 36,000+ daily simulation test records across 6 parking scenarios

DJI RoboMaster | [Git repo](#) | [Video](#)

Team Lead

2022-2024

- Led a 40-student team to **deliver** 8 fully functional robots **from scratch**, winning the **3rd place** in RoboMaster 2023
- Gained **US\$20,000** in sponsorship by improving shooting, motion control, and detection through **7000+ test iterations**

Co-Head of Robot Computer Vision

- Deflected a **real-time** detection system for mobile robots, gaining **promotion** for code contributions and troubleshooting
- Enhanced detection accuracy by **25%** by upgrading from pure OpenCV detection to an OpenCV + **YOLOv7** hybrid system
- Refactored the system from **Python to C++** with 5 peers, achieving **60 fps** on NVIDIA NX and **80 fps** on NVIDIA AGX
- Initiated a movement prediction algorithm processing detected key points, outperforming **90%** competitors in metrics

FIRST Tech Challenge | [Team Documentary](#)

2017-2020

Team Lead

- Bent the performance of a 15-member team, leading to **2 FIRST World Championships admissions**(top 2 % out of 7500 teams globally), **1 Inspire Award**(1st out of 40 teams), and **3 Connect Awards**(top 8% out of 60 teams)
- Developed an autonomous system using multiple sensors and **OpenCV/TensorFlow SDK**, achieving **95%+** detection accuracy and securing the **highest** Regional score with rule-based human driver imitating strategies

RESEARCH

Visual Explainer For Deep Learning Image Classification | [Git repo](#) | [Video](#)

2023-2024

- Designed a 2-stage **semantic segmentation** and an **AutoEncoder** with tree constraints, using Shapley Value to extract and rank concepts by importance, boosting consistency score by 35% on 1000+ images from 20 **ImageNet** classes
- Developed a **Django backend APIs** for page navigation, handling **GET** and **POST** requests, and efficient data retrieval
- Built a **Vue.js frontend** with features such as user login, image segmentation, and contribution heatmap visualization

Mining Property Relations of NASICON Solid Electrolyte

2021-2022

- Improved a Named Entity Recognition (NER) model by labeling 7,000+ high-quality sentences, boosting precision by 5%, recall by 3%, and F-1 score by 4%
- Developed a BERT-based data **processing pipeline** to extract 106,896 entities and 260,475 entity-relation triples from 1,808 literature sources, storing result in Neo4j and MySQL

Selected Projects

MealMate: From Cravings to Carts | [Git repo](#) | [Video](#)

2024

- Designed an **LLM-powered assistant** to generate tailored shopping lists using user preferences and real-time inventory
- Benchmarked GPT-4o-mini against GPT-4 and GPT-3.5-turbo for LLM agent performance, demonstrating 20% higher recipe match precision and 40% suggestion accuracy, and 42% faster processing time
- Built a showcase using **React.js** for the frontend and **Flask** for the backend with effective prompts and transaction logic