# Yihan Zhou

□ +86 158 9598 9396 | @ backlight0128@163.com | **in** LinkedIn | **?** GitHub | **?** Suzhou, China

# EDUCATION

## Cornell University (Cornell Tech)

M.Sc. in Computer Science and Information Systems;

New York, USA

 $Sep \ 2024 - May \ 2026$ 

## University of Liverpool (Xi'an Jiaotong-Liverpool University)

B.Sc. in Information and Computing Science; GPA: 3.93/4.00 RANK: 1/176

Suzhou, China Sep 2020 – Jul 2024

• Academic Achievement Scholarship: 25,000 CNY — Awarded to Top 5% of students.

#### SKILLS

Languages: Java, Python, JavaScript, MATLAB, SQL, MySQL, C#

Technologies: Vue.js, Spring, MySQL, Git, OpenCV, PyTorch, TensorFlow

# WORK EXPERIENCE

## Jiangsu Phoenix Institute of Intelligence Education

Nanjing, China

Machine Learning Engineer

Jan 2024 - March 2024

- Trained the Yolov8 model to accurately track and measure the distance of thrown shot puts, aiming to reduce manual assessment workload for physical education teachers and improve accuracy.
- Integrated the posture detection model into our product to achieve precise automatic jump rope counting, reaching an accuracy rate of over 95%.

#### Research Experience

# Nanjing University: State Key Laboratory for Novel Software Technology

Nanjing, China Advisor: Xin Chen

Research Assistant

Oct 2023 – Present

- Developed a sophisticated QA application harnessing Langchain and LLM technology to incorporate local knowledge bases, elevating contextual understanding and response precision.
- Orchestrated the end-to-end integration of localized reasoning within LLMs, from initial design through to secure deployment and optimization.

#### XJTLU Summer Undergraduate Research Fellowship (SURF)

Suzhou, China

 $Programming\ and\ Simulation\ of\ an\ Autonomous\ River\ Cleaning\ Robot$ 

Local Knowledge Based LLM Q&A App With Langehain & ChatGLM

Advisor: Jieming Ma Jun 2022 – Sep 2022

Research Assistant

- Designed and simulated an AI-powered automated river-cleaning robot, mimicking real-life river conditions.
- Mastered ROS and Gazebo software on Linux to overcome technical challenges, enhancing accuracy and efficiency.
- Developed and implemented an SSD MobileNetv2-based litter detection algorithm, achieving a mean Average Precision (mAP) over 0.75 and ensuring effective pollutant identification.
- Led the operational testing and deployment of the robot, contributing to environmental conservation efforts.

## ACADEMIC PROJECTS

#### iPet: Pet Grooming Appointment Web Page | GitHub

- Spearheaded the design and development of iPet, leading to a significant 30% increase in customer bookings.
- Engineered a robust booking management system to streamline appointment scheduling and tracking.
- Integrated a secure and efficient payment processing system to facilitate smooth transactional operations.
- Developed a comprehensive customer communication system, successfully decreasing missed appointments.

#### An Ataxx System with a Built-in AI | GitHub

- Crafted an intricate Ataxx game system using Java, integrating a sophisticated AI to elevate gameplay experience.
- Combined Monte Carlo techniques, the Negamax algorithm and Alpha-beta pruning to create a highly effective AI.
- Enhanced AI efficacy, achieving an impressive win rate exceeding 90% against standard opponents.
- Developed an intuitive user interface, providing a smooth gaming experience.