Changpeng Yang

Mobile: (+86)18518981828 | Email: thkelper@outlook.com

EDUCATION EXPERIENCES

Peking University   **Beijing, China**

Master of Industrial Software, Cell Mechanics Lab.   *Sep. 2021 – June 2024 (Expect)*

- **Key Courses:** Machine Learning, Cell Mechanics, Multi-omics Artificial Intelligence Methods.

University of Shanghai for Science and Technology   **Shanghai, China**

Bachelor of Information Management and Information Systems.   *Sep. 2016 – June 2020*

- **Key Courses:** Operating System, Data Structures and Algorithms, Computer Network, Management Science.

RESEARCH INTERESTS

- Lab and pipeline automation.
- Develope open-source computer vision algorithms on microscopy image analysis.
- High-throughput drug screen combined with automation equipment and artificial intelligence tools.
- Dissecting multi-omics data with artificial intelligence algorithms such as transformers.
- Large language and vision models to understand cell.

RESEARCH EXPERIENCES

Institute of Biomaterials, Chinese Academy of Science   **Zhejiang, China**

Visiting Student   *Jan. 2023 – Sep.2023*

A high-throughput drug screen system based on deep learning to recognize collagen gel contraction

- Learn cell culture and wet lab related techniques from scratch.
- Devise and implement protocol to validate collagen gel contraction for drug screen.
- Explore semantic segmentation algorithms to improve the efficiency of collagen gel recognition.
- High-throughput drug screening using AI algorithms, pipetting workstations, and high-content microscopy.
- Validate the whole system on range of cells and drugs.
- Patent pending and deeper research exploration.

PROFESSIONAL EXPERIENCES

4Paradigm   **Beijing, China**

Computer Vision Intern   *June 2022 – Dec. 2022*

- Adapt MMCV flexibly to explore a series of algorithms for the following projects.
- Image Segmentation Algorithm for Image Tampering Region Recognition.
- Content Based Image Retrieval Algorithm.

Cyberwing   **Beijing, China**

Large Language Model Intern   *Nov. 2023 – June 2024(Expect)*

- Investigate LLMs development in different fields.
- Develop an auto assistant to facilitate prompt engineering.
- Analyze raw data characteristics and construct a high-quality corpus.

HONORS AND AWARDS

Hongcai Scholarship, Peking University   *Sep. 2021*

Outstanding Graduate, University of Shanghai for Science and Technology   *June 2020*

EXTRACURRICULAR ACTIVITIES AND ACHIEVEMENTS

Project manager of You & Me, A Public Benefit Program on Spiritual Accompaniment.   *Sep. 2017 –Sep. 2019*

Leader of Summer Charity Teaching Team.   *July 2018 –Sep. 2018*

SKILLS AND CERTIFICATIONS

Skills: Python, C++, Pytorch, Wet experiment skills.

Language: Chinese(native), English(CET4-545, CET6-547, IELTS 6.5).

Interests: Volunteering, Photography, Cycling.