

RESUME

PERSONAL INFORMATION

Name: Yangyang Liu [\[home page\]](#)

Contact Information: 18800102550

Email: yangyang-liu@student.cup.edu.cn

Graduate: China University of Petroleum-Beijing (CUP)

Degree: Master degree

Contact Address: No.355 Anding Road, Karamay District, Karamay City, Xinjiang Uygur Autonomous Region

PERSONAL PROFILE

I have studied "Numerical Analysis", "Random Process", "Optimization Theory", "Linear Algebra", "Computer Network", "Data Structures" and other courses. I am proficient in C++, JAVA, python, Matlab, and other programming languages. I have a strong self-learning ability and can quickly learn new knowledge. And I can complete tasks assigned by teachers efficiently. In addition, I have a strong sense of team and can obey the task arrangement of the group.

Research Interests: Computer Vision, Graph neural networks, machine learning, contrast learning, Reinforcement learning.

Education

Master degree **China University of Petroleum (Beijing) (2020.9~2023.6)**

- List of "Double First-Class" University Projects、Project **211**
- Major: School of Information Science and Engineering, Control Science and Engineering
- Average score: **89.2**
- Awards and Honors:
 - 1) First Prize of Academic Scholarship (September 2021);
 - 2) Promotion and Exemption Scholarship of China University of Petroleum (Beijing) (September 2020);
 - 3) The third prize of the China Graduate Mathematical Modeling Competition in 2021;
- Mentor: Jian-wei Liu [\[home page\]](#)

Bachelor degree **China University of Petroleum (Beijing) (2016.9~2020.6)**

- List of "Double First-Class" University Projects、Project **211**
- Major: Software Engineering, College of Petroleum
- Rankings: **2/58**; Average score: **87.56**
- Awards:
 - 1) First Prize of Academic Scholarship (September 2019);
 - 2) First Prize of Academic Scholarship (September 2018);
 - 3) First Prize of Academic Scholarship (September 2017);
- Honors:
 - 1) "Advanced individual in scientific and technological innovation";
 - 2) "Merit Student" and "Excellent League Member" Awarded by SCUUC;
- Competition:

- 1) Second prize of Lanqiao Cup Program Design Competition in Provincial Competition;
- 2) Third prize in the 10th Chinese College Students Computer Design Competition (Internet of Things Group)

Publications

- (1) **Yangyang Liu**, Jian-wei Liu. An attempt to apply the homotopy method to the domain of machine learning. Expert Systems with Applications (Q1(SCI) (manuscripts)).
- (2) **Yangyang Liu**, Jian-wei Liu. The Time-sequence Prediction via Temporal and Contextual Contrastive Representation Learning. 19th Pacific Rim International Conference on Artificial Intelligence (PRICAI 2022).
- (3) Jianchun Jiang, Xuhui Zhan, **Yangyang Liu**, Chong Tang, Jia-nan Wang, Jian-wei Liu. Quality Analysis of high-density polyethylene based on Intelligent. The 4th International Conference on Industrial Artificial Intelligence (IAI 2022).
- (4) **Yangyang Liu**, Yi Cao, Shoubin Li. ES-LDGOP: A robust Image Texture Descriptor Based on Local Binary Pattern (In preparation)

Patents

- (1) A deep learning-based detection and identification system and method for polyethylene particle defects. 2021. CN112837311A. National invention patent
- (2) Heald filament separation detection system and method based on self-learning mode. 2020. CN110865084A. National invention patent
- (3) A high-speed video acquisition and processing circuit structure. 2022. CN216249232U. National invention patent
- (4) Detection system and method of heald wire separation based on a self-learning model. 2020. CN110865084AU. National invention patent
- (5) A method for yarn anomaly detection and control of the automatic mechanizing machine. 2022. CN114120183A. National invention patent

Other Project

- (1) 1/6/2021-1/10/2022, Research on the automatic extraction model of crucial information from petrochemical scientific literature, **Algorithm engineer**, Horizontal project of Internet Software Technology Laboratory, Institute of Software, Chinese Academy of Sciences
- (2) 1/3/2021-1/6/2021, Knowledge extraction model, **Member**, Horizontal project of Internet Software Technology Laboratory, Institute of Software, Chinese Academy of Sciences
- (3) 5/2018-5/2019, Intelligent electronic access control, **Project Leader**, University Student Science and Technology Innovation Project of China University of Petroleum (Beijing)

Internship

2018.09 - 2019.02	Institute of Software, Chinese Academy of Sciences, internship My work involves face data labeling, photo data cleaning, and face detection model training.
Since 2021.06	Institute of Software, Chinese Academy of Sciences, internship During this period, my main work is information extraction. I completed two projects: "Knowledge Extraction Model" and "Research on automatic extraction model of key information of petrochemical scientific literature".