YU JIANG

yujiangjulia@gmail.com https://yujiangjulia.github.io

Education

Sichuan Agricultural University *Ya'an, Sichuan*
Sophomore in Data Science and Big Data Technology *Sep 2022 – present*

- GPA: 90.28 / 100
- Related Courses: Data structure, Python, Machine learning, Artificial intelligence, Data analysis, Operations Research

Sichuan Agricultural University *Chengdu, Sichuan*
Freshman in finance(minor) *Sep 2023 – present*

- Related Courses: Statistics, Finance, Economics, Financial management, Risk management

Skills

- ✓ Programming Languages: Expertise in Python; proficient in C, C++, MATLAB; familiar with CSS, JavaScript, HTML.
- ✓ Frameworks and Tools: Proficient in PyTorch and TensorFlow; basic knowledge of Linux
- ✓ Data Science: Skilled in data analysis, visualization, and machine learning model development
- ✓ Languages: Fluent in English and native in Chinese

Publication

"***Gastrointestinal image stitching based on improved unsupervised algorithm***",
Submitted to "PlOS ONE", Accepted(currently in press).
Authorship Order: Third Author *2024*

Research Experience

Student Psychological Assessment System Based on CloudEdge Collaboration
Researcher *Mar 2023 - present*

- ✧ Utilized intelligent data analysis methods to enhance the accuracy of student mental health assessments, offering more comprehensive protection.
- ✧ Developed a multi-head attention mechanism for text sentiment analysis, enabling the model to better identify key words and phrases expressing emotions, and to learn different focal points.
- ✧ Significantly improved the model's sensitivity to emotional information, achieving a

more accurate classification of text as positive, negative, or neutral emotions.

- ✧ Conducted a comparative analysis against baseline models, identifying and elucidating the reasons for performance differences, thereby contributing to the refinement of our model's effectiveness.

Medical Visualization System Based on Computer Vision

Researcher *Mar 2023 - present*

- ✧ Leveraged advanced deep learning techniques, with a focus on unsupervised learning methods and NERF 3D reconstruction technology, to develop an intelligent assisted medical system. This system aims to enhance the efficiency and accuracy of medical image processing, analysis, and diagnosis.
- ✧ Engineered a solution that utilizes unsupervised learning to process a vast amount of medical image data, enabling the automatic extraction of features and patterns within the data.
- ✧ Achieved significant reductions in data annotation costs and improved the generalization capabilities of the model, thereby advancing the project's goal of creating more accessible and efficient medical diagnostic tools.

FieldPestNet: High-Accuracy Insect Recognition in Agricultural Fields

Researcher *Mar 2024 - present*

- ✧ By experimenting with various machine learning and deep learning methods, the project aims to improve the accuracy of insect recognition in agricultural fields, providing technological support for precision farming.
- ✧ Semi-supervised and unsupervised learning techniques are employed to reduce the need for data annotation, improving the training efficiency and scalability of the model.

Work Experience

Chengdu Shuangliu Branch of China CITIC Bank Co., LTD

Intern *Jan 2024*

- ✧ Applied principles and techniques of risk management in financial markets while gaining expertise in various financial products, integrating data-driven approaches to assess and mitigate market risks, credit risks, and others.
- ✧ Leveraged advanced data analysis techniques, including machine learning algorithms, to evaluate the impact of different scenarios on various industries, contributing valuable insights to decision-making processes.
- ✧ Actively participated in the innovation and development of financial technology, focusing on the testing and application of AI-driven tools such as predictive analytics models and algorithmic trading systems. This hands-on experience not only enhanced my understanding of AI technologies but also sharpened my problem-solving skills and ability to innovate in the finance industry.

Mianyang Changhong Electric Co., LTD, Cloud Data Center, Intern
Intern *Jul 2023 – Aug 2023*

- ✧ Gained hands-on experience in managing relational databases like MySQL.
- ✧ Applied backend development techniques using Java to implement various projects.
- ✧ Developed and implemented predictive models for sales forecasting, using Python and machine learning libraries such as Scikit-learn, to improve decision-making and accuracy.
- ✧ Worked collaboratively with the team to optimize cloud-based solutions for data processing.

Awards & Honors

- ✓ Project achievement:

Sichuan university students innovation and entrepreneurship project
2023

University-level university student research interest project
2023

- ✓ Competition achievement:

Second Prize, Sichuan College Students Intelligent Agricultural Equipment Innovation Design Competition
2023

Second Prize, Red Special Category, 17th "Challenge Cup" Sichuan Provincial Extracurricular Academic Science and Technology Works Competition for College Students
2023

Third Prize, Sichuan Provincial Undergraduate Group, Sichuan College Student Computer Design Competition and 16th China National College Student Computer Design Competition
2023

Outstanding Student, University Level
2023

Second Prize, Big Data Special Category, 8th Internet of Things Application Innovation Competition
2023

Silver Prize, Undergraduate Creative Group, Higher Education Division, "Internet+" College Students' Innovation and Entrepreneurship Competition, Sichuan Agricultural University
2023