YU JIANG

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Education

Sichuan Agricultural University Ya'an, Sichuan
Junior 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
Sophomore 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.

✓ **Data Science and Machine Learning Tools**:

Proficient in PyTorch, TensorFlow, and Scikit-learn; experienced 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***",
Published in "PlOS ONE".
DOI: https://doi.org/10.1371/journal.pone.0310214
Authorship Order: Second Author 2024

Research Experience

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

✧ Leveraged advanced data analytics to enhance the accuracy of student mental health assessments, providing more comprehensive protection.

✧ Designed and implemented a multi-head attention mechanism for text sentiment analysis, enabling more precise identification of emotional keywords and phrases, while learning distinct focal points.

✧ Increased model sensitivity to emotional cues, achieving more accurate classification of

text into positive, negative, or neutral emotions.

- ✧ Performed a comparative analysis with baseline models, identifying key factors contributing to performance improvements, and refining the model's overall effectiveness.

Medical Visualization System Based on Computer Vision

Researcher Mar 2023 - present

- ✧ Applied cutting-edge deep learning techniques, focusing on unsupervised learning methods and NERF 3D reconstruction, to develop an intelligent medical assistance system, improving efficiency and accuracy in medical image processing, analysis, and diagnosis.
- ✧ Developed an unsupervised learning solution to automatically extract features and patterns from large-scale medical image data.
- ✧ Reduced data annotation costs by 30% and significantly enhanced the model's generalization capabilities, advancing the goal of creating more accessible and efficient 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 Feb 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 2024 – Aug 2024

- ✧ 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

- ✓ Research Grants:

Sichuan university students innovation and entrepreneurship project

2023

University-level university student research interest project

2023

- ✓ Competition Achievements:

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