

# YU JIANG



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<https://yujiangjulia.github.io>

## Education

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### Sichuan Agricultural University

Ya'an, Sichuan

- Junior in Data Science and Big Data Technology Sep 2022 – present
- Minor in Finance GPA: 90.28/100.00
- Relevant Coursework: Probability and Statistics, Algebra, Analysis, Discrete Math,, Data structure, Python, Machine learning,, Data analysis, Operations Research, Finance,, Economics.

## Skills

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- **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

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*"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

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### 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.

## Work Experience

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### 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

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- Research Grants:

**Sichuan university students innovation and entrepreneurship project**

**University-level university student research interest project**

- Achievements:

**Outstanding Student**, University Level