# Kunjun Shu

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Kunjun Shu's { Personal Homepage / Github / Technology Blog / Zhihu }

RESEARCH INTERESTS EDUCATION Intersection of Statistics and Machine Learning & Deep Learning, as well as AI Agent Development.

Fudan University, Shanghai China

B.S. in Statistics and Data Science, GPA: 3.83 / 4.00

**Expected 2027** 

• Coursework: Regression Analysis (A+), Data Structure and Algorithms (A), Python Programming (A), Operations Research (A), Multivariate Analysis (A), Mathematical Analysis (A), Probability Theory and Mathematical Statistics (A), Sampling Survey (A).

Honors and Awards The 2nd Prize Scholarship (ranked 27)

The 3rd Prize Scholarship (ranked 30)

The 14th and 15th National Mathematics Competition for College students: 2nd Prize (Shanghai)

RESEARCH EXPERIENCE

## **Research Assistant**

AI Medical General Doctor, AIMGD

Supervised by Wenwen Li, I have developed an AI Agent (AI Medical General Doctor, AIMGD), whose target is to leverage Large Language Models (LLMs) to optimize patient-provider communication. The project has undergone preliminary trials in several community hospitals. More information is available on the website: link.

- Designed and implemented an information entropy gain algorithm to mine core symptoms.
- Applied FastAPI framework and asynchronous programming to improve performance.

**PROJECTS** 

## Binary Classification Model based on Chest CT Images

[Code]

With MaxPooling for dimensionality reduction, applying Logistic Regression with LASSO regularization, the model achieved an accuracy rate of up to 98.30% on the test dataset (demonstrating comparable performance to CNN while using much fewer parameters).

#### CIFAR-10 Classification (ResNet18)

[Code]

Applying ResNet18 pre-trained model, I established a classification for CIFAR-10, with accuracy rate 0.76750 in Kaggle competition.

# Stock prediction model based on neural network LSTM

[Code]

Applying LSTM, I developed a Stock prediction model based on neural network LSTM.

## **Some Notes**

I am sharing some notes at my blog is Kage'Blog and Zhihu

- Building Neural Networks with PyTorch: Blog link or Zhihu link.
- Data Structure and Algorithms Notes: Blog link or Zhihu link.
- SQL Notes: Blog link or Zhihu link.
- R Programming Notes: Blog link or Zhihu link.

## COMPUTER SKILLS

- Programming: Python (PyTorch, Pandas, Numpy), R, C
- Database Management: SQL, MySQL
- Web & API: FastAPI, Django, HTML, CSS
- Applications: Conda, Git, LATEX, Markdown