Hongxu Chen

Email: hongxuchen@mail.ustc.edu.cn   Telephone: (+86) 18156396917

Education

University of Science and Technology of China (USTC), undergraduate   Sep. 2021– Present

School of the Gifted Young   Major: Data Science and Big Data Technology

Overall GPA: 3.46/4.30 (85.22/100)   Ranking: 22/53

Core Courses: Mathematical Analysis B1&2(92/100), Linear Algebra(94/100), Algebra Fundamentals(95/100), , Functions of a Complex Variable(92/100), Data Structure(93/100), Computer Programing(89/100)

Research Experience

USTC LUNA TEAM   May. 2023 - Present

Advisor: Professor **Qi Liu & Zhenya Huang**

- Provided a MooCCubeX education data analysis for Anhui Province Key Laboratory of Big Data Analysis and Application (BDAA). Responsible for the backend API changes and optimization of the educational resource analysis module of USTC LUNA AI laboratory platform.
- Built a Transformer-based ViT-B/16 neural network for image classification and optimized the model based on the training dataset and GPU resources.
- Used PyTorch to reproduce the residual neural network ResNet18 in the paper "*Deep Residual Learning for Image Recognition*" and applied it to the CIFAR10 dataset for image classification.

USTC Student Research Program   Dec. 2023 - Present

Advisor: Professor **Zhenya Huang**

- Researching on a method for evaluating test question resources based on Chain-of-Thought technology of large language model and its application.

Curriculum Project   Sep. 2021 - Present

- Implemented support vector machines based on the SMO algorithm and gradient descent algorithm and conducted a detailed analysis of the results for specific distributed datasets. The work was rated as ***excellent***.
- Reproduced the clustering algorithm in the paper "*Clustering by fast search and find of density peaks*".

Leadership & Activities

Mathematics competition tutor in Hefei No. 6 High School   Sep. 2023 - Present

- Responsible for teaching Number Theory.

Member of USTC Calligraphy and Painting Club   Sep. 2021 - Present

- Actively participated in club activities and often served as a volunteer.

Honors & Awards

The second prize in The 13th Chinese Mathematics Competitions, Oct. 2021

The second prize in The 35th Chinese High School Mathematics League, Sep. 2019

The first prize in The 5th Campus Calligraphy and Painting Contest, Dec. 2021

Skills

Programming: Familiar with Python, fluent in C++/C, Verilog, HTML/CSS/JavaScript

Databases: MySQL (MySQL Workbench)

Others: Web Crawler with Python, Data Analysis with Python , Computer Music Composition (FL Studio)