Yuzhe Yang

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A Year 3 CSE student with a keen interest in deep learning. Currently exploring GCN, LLM.

EDUCATION

The Chinese University of Hong Kong, Shenzhen, B.Eng. in Computer Science and Engineering

May 2025

Core Courses: Data Structure | Operating System | Computer Architecture | Machine Learning | Optimization | NLP FAST-CA Project Undergraduate Research Assistant, SDS, CUHK(SZ)

Aug 2023 - Nov 2023

- Contributed to the development of a deep learning model predicting airport network delays, improving accuracy and reliability of predictions.
- Implemented baseline models and measured performance, contributing to research accepted by Information Fusion.

Research in Conditional Spatio-Temporal Graph, *Undergraduate Research Assistant* | *SDS, CUHK*(*SZ*)

 $\rm Jan~2024$ - $\rm Now$

• Implemented a conditional spatio-temporal graph model for traffic flow prediction, showcasing innovation in continuous graph construction using Ordinary Differential Equations.

Deep Learning Approach for SDN Network Flow, Research Internship | ICNLAB, PKU(SZ)

Jan 2024 - Now

• Developed a novel network flow prediction method using a modified Informer architecture for Software-Defined Networks, aiming at proactive congestion management.

EXPERIENCE _

China Telecom Beijing Research Institute Remote Intern AI Large Model Research Team | Beijing, China

Jan 2024 - Mar 2024

• Analyzed technology trends, applications, and their impact on the industry within the AI Large Model Research Team.

Shenzhen Branch of China Telecom Part-time Intern | Shenzhen, China

Jan 2024 - Now

• Engaged in Time Series Analysis and Data Visualization to analyze and mine GIS Data for actionable insights.

PROJECTS _

Evaluation Model of Light Pollution by Multi-conditional AHP | MCM

Feb 2023

- Performed GIS-data analysis and mathematical modeling to assess light pollution levels based on population data and regional income.
- Utilized GeoPandas and Folium for data analysis and visualization, contributing to a comprehensive understanding of the impacts of light pollution.

1st and Future - Player Contact Detection Competition | Kaggle

Dec 2022 - Mar 2023

- Advanced data preprocessing and integration for video analysis and player tracking, leading to a Bronze Medal achievement.
- Innovated predictive features through statistical modeling, significantly enhancing model accuracy in contact detection.

Game Theory Analysis of SEO Strategies: From Methods to Models

Nov 2023 - Dec 2023

- Researched and applied SEO strategies, developed a new ranking algorithm focusing on keyword frequency, traffic, and linkage.
- Implemented game theory principles to SEO, including simulation of an -random walk and analysis of Nash Equilibrium.

AI-Based Flight Delay Insurance Recommendation System

Jun 2024 - Now

- Developing a system to predict flight delays and recommend personalized travel insurance using deep learning, NLP, and sentiment analysis.
- Focused on enhancing customer satisfaction through accurate delay predictions and tailored insurance recommendations.

Open Problems - Multimodal Single-Cell Integration | Kaggle

Feb 2022 - Apr 2022

- Engaged in machine learning and data analysis to predict co-variances in DNA, RNA, and protein measurements in single cells, achieving a Silver Medal.
- Contributed to advancing understanding in multimodal single-cell data integration and analysis.

Happywhale - Whale and Dolphin Identification | Kaggle

Aug 2022 - Nov 2022

- Applied machine learning techniques for identifying whales and dolphins from photographic imagery, securing a Silver Medal.
- Enhanced data analysis methods to recognize unique characteristics, significantly improving identification accuracy.

CPU Circuit Design | Class Project

Jul 2023

- Designed and implemented simple RISC-V instructions through circuit design, achieving CPU pipelining.
- Focused on understanding and applying core concepts of computer architecture and digital logic design.

SKILLS_

 Programming Languages
 Python, C++, RISC-V, HTML, JavaScript, React, LATEX

 Technologies
 Git | VS Code | MATLAB | Linux

 Other Tools
 Lightroom | Photoshop | Power BI | Figma

 Languages
 English (Fluent) | Mandarin (Native)