Zhili Yang

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EDUCATION

Southern University of Science and Technology <div align="right">**Shen Zhen, China**</div>

Bachelor of Science in Data Science; Department of Statistics and Data Science <div align="right">*Jan 2023 - Present*</div>

- Relevant Coursework: Advanced Natural Language Processing, Deep Learning, Statistical Learning, Data Structure and Algorithm Analysis, Distributed Storage and Parallel Computing, Operational Research and Optimazation, Mathematical Analysis, Probability Therory, Mathematical Statistics, etc.

Marjor in Industry Design; Department of System design and intelligent manufacturing <div align="right">*Sep 2021 - Dec 2022*</div>

- Learned some basic courses of industry, such as fundamentals of materials, design science, rapid technology prototyping, analog circuits. Then switched to my current major: Data science.

University of California, Berkeley <div align="right">**Berkeley, CA**</div>

Berkeley International Student Program <div align="right">*Jan 2024 - May 2024*</div>

- Relevant Coursework: Introduction to Time Series(STAT 153), Modern Statistical Prediction and Machine Learning(STAT 154/254), Introduction to Artificial Intelligence(CS 188), Audited: Deep Unsupervised Learning(CS 294-158)

SKILLS

- Tools: Github, Huggingface,
- PyTorch, Tensorflow
- Code: Python, Java,
- R code, Markdown, Latex
- System:Linux, Windows,
- MacOS

RESEARCH EXPERIENCE

Data filtering during insrructional fine tuning of LLM <div align="right">**Peking University, SUSTech**</div>

Under the guidance of Assistant Professor Guanhua Chen, Research Assistant He Zhu <div align="right">*Sep 2024 - Dec 2024*</div>

- Reproduced some classical data filtering work under the guidance of RA.
- Summarizes the existing better data screening methods, improves the fusion based on them, and puts forward some effective evaluation methods.

National University of Singapore, School of Computing Summer Workshop <div align="right">**Singapore, SG**</div>

Student in Deep Learning cluster <div align="right">*May 2024 - Jul 2024*</div>

- The final grade of the workshop is A(Excellent).
- Trained a specific object detection algorithm based on YOLO and used open source speech2text to design a language module, which can enable a single-chip computer-powered car to capture specific objects and follow basic commands.

3D panoramic simulation for metaverse <div align="right">**SUSTech**</div>

Project leader (Guangdong Climbing Program), under the guidance of Professor Zhaoyuan Ma <div align="right">*Oct 2022 - Dec 2022*</div>

- A final patent application in progress.
- Led project scheduling and contributed to the fish camera splicing algorithm for a 3D panorama acquisition and transmission product in the metaverse. Designed and modeled the product's appearance as well.

PROJECT EXPERIENCE

Github Homepage: *https://github.com/radicalyyyahaha*

Personal Website: https://radicalyyyahaha.github.io/2024/10/21/Project/

Independent Research Project

- **Poem_Generator:** An attempt to recreate nanoGPT from scratch, then use for poem generate after a huge modification.
- **Protein morphology prediction:** Did some research on how to use DL models for protein sequence and structure prediction.
- **Implementation of classic data selection works:** IFD, Superfiltering, LESS, etc.

Course Project

- **Chess AI:** Built a chess game for a freshman Java course, where a AI bot made random moves based on the player's actions.
- **Integrated Design:** Designed a face recognition system for smart trash can, marking my first experience with AI algorithms.
- **Heuristic Search:** Expand ARA* algorithm for dynamic path planning in a maze, introducing me to reinforcement learning.
- **Sound Data Classification:** Designed a CNN model with residual networks for sound classification using ESC-50 data in a statistical learning project.
- **Improved YOLO v8:** Enhanced tiny object detection by adding an attention module to YOLO v8n, achieving a mAP50-95 of 0.35 in an AI course project.
- **Berkeley CS-188:** https://github.com/radicalyyyahaha/Berkeley-CS188
- **Graduation Project:** Evaluation of improved LoRA methods for multi-domain benchmarks.