蔡琇鈞 (Tsai Hsiu-Chun)

chun252515@gmail.com +886-905252515 https://hsiuchun.github.io/

Brief Intro

I am a conscientious and responsible guy and have the patience to learn the knowledge I am interested in, thus I can complete the assigned task well. My interests include deep learning, machine learning, natural language processing, data analysis, web Design, etc.

蔡琇鈞

(Tsai Hsiu-Chun)

hsiuchun

@hsiuchun

Education

- Information Management, BBA, National University of Kaohsiung, Kaohsiung, Sep. 2018 - Jun. 2022
- Information Management, MBA, National Central University, Taoyuan, Sep. 2022 - Now

Technical Skills

Programming Skills	C, Java, Python, HTML/CSS, PHP, JavaScript
Database	MySQL, phpMyAdmin, PostgreSQL
ML Frameworks	Keras, PyTorch, TensorFlow
Language ability	TOEIC: 820 (May. 2024)

Thesis

DACL: A Dynamic-Adjusted Contrastive Learning on Sentence Semantic Matching task

- Optimize the Sentence Semantic Matching task by deep learning with PyTorch.
- Used PLM, and CL to improve the semantic representation to provide discrimination answers.

Journal

- T.-H. Yang*, C.-Y. Wang†, H.-C. Tsai†, Y.-C. Yang†, and C.-T. Liu, "YTLR: extracting yeast transcription factor-gene associations from the literature using automated literature readers," Computational and Structural Biotechnology Journal, vol. 20, pp. 4636-4644, 2022. (SCI 2022 impact factor = 6.155 Ranking 23.6% (70/296) in Biochemistry & Molecular Biology).
- T.-H. Yang*, C.-Y. Wang†, H.-C. Tsai†, and C.-T. Liu†, "Human IRES Atlas: an integrative platform for studying IRES-driven translational regulation in humans," Database, vol. 2021: article ID baab025; doi:10.1093/database/baab025, 2021. (SCI 2020 impact factor = 3.451, Ranking 24% (14/58) in Mathematical & Computational Biology).
- T.-H. Yang*, S.-H. Wu†, F.-Y. Zhang†, H.-C. Tsai, Y.-C. Yang, Y.-Y. Tseng, and W.-S. Wu*, "An automated pipeline to extract the Drosophila modular transcription regulators and targets from massive literature articles," (Under Review).

Conference

- C.-Y. Wang†, K.-C. Tu†, Y.-C. Yang†, H.-C. Tsai† and T.-H. Yang*, "農作蜜棗損傷原因之高效能分類。" In 2021 International Conference on Technologies and Applications of Artificial Intelligence (TAAI): Taichung, Taiwan. (Nov. 2021)

Projects

Optimize Interactive Chatbot (Sep. 2023 - June 2024)

- An industry-university cooperation case with FET-net.
- Utilized deep learning, such as the PLM to optimize the model algorithm to improve the system.

👤 ***Comment Sentiment Analysis*** (Jan. 2023 - Jan. 2023)

- Fine-tuned a BERT model for sentiment analysis of movie comments with PyTorch.

👥 ***Movie Review System*** (Oct. 2022 - Jan. 2023)

- A web-based movie review system with Python and Django.
- A completed development process including planning, implementing, and testing.

👤 ***Escape Game*** (Aug. 2022 - Aug. 2022)

- A simple web-implementation escape game using JavaScript.

👤 ***OpenStreetMap*** (May. 2022 - May. 2022)

- An open street map that instantly displays the remaining number of rapid antigen tests.

👥 ***Pick Up Choose*** (Aug. 2021 - Dec. 2021)

- Fine-tuned an EfficientNet model for jujubes injured causes classification.
- Fine-tuned YOLOv4 object detection models to obtain jujube injured location in images.
- Designed an automatic grading application for jujubes on smartphones with Flutter.

👥 ***Who's the victim?*** (Sep. 2020 - Jan. 2021)

- Designed a computer game which adapted from the classic board game "Bang!".
- Designed and Implemented game functions, events, and GUI interfaces with Java programming.

👥 ***Course Selection System*** (Mar. 2020 - Jun. 2020)

- Designed a web-based school course selection system with PHP and MySQL.
- Utilize JavaScript to beautify the appearance of the website.

👤 ***Moving Soldier in Maze*** (Sep. 2020 - Jan. 2021)

- Designed a simple GUI interface and controlled the soldier moving in the maze.
- Implemented path searching algorithms including DFS, BFS, and UCS.

👤 ***Airline Database Design*** (Mar. 2020 - Jun. 2020)

- Designed a database from the requirements of the customers and the company.
- Used ERD, Relational Model, UML, and Normalization to systematically construct the database.
- Filtered data from the database with SQL and presented the search results on a simple website.

WORK EXPERIENCE

Teaching Assistant

- Artificial Intelligence and Machine Learning in MIS, NCU. (Mar. 2023 - Jun. 2023)
- Object-Oriented Programming in IM, NUK. (Mar. 2021 - Jan. 2022)
- Design of Database in IM, NUK. (Mar. 2021 - Jun. 2021)

Research Assistant

- Assist Prof. Yi-Cheng Chen (Advanced Data Mining & Learning (ADML) Laboratory) in completing the cases. (Sep. 2022 - Now)
- Assist Prof. Tzu-Hsien Yang (Computational Biology & Intelligence System Lab) in completing the experiments of methodology in papers. (Jan. 2021 - Sep. 2022)