

Liu Yuhang

E-mail: 2021010905023@std.uestc.edu.cn | Address: Chengdu, China

EDUCATION

University of Electronic Science and Technology of China (UESTC)

Chengdu, China

Major: Communication Engineering | **GPA:** 4.00/4.00

Average Score: 93.81/100 | **Rank:** 2/202

Sep.2021 - Now

Core Courses: Signals and Systems | Digital Signal Processing | Principle of Communications | Digital Logic Circuit and System | Stochastic Signal Analysis

English Ability: CET-4:624 | CET-6:575

PROJECT EXPERIENCE

EMG controlled Super Mario game

Mar.2022 – Oct.2022

- Collected and read muscle current signals using Arduino, built a CNN to analyze the signals, identified different muscle movements, and applied them to control the Super Mario game
- Received an outstanding project award for the First-year Freshmen Extracurricular Innovation Practice Project of UESTC, and was selected for the exhibition of outstanding works

Multi-modal emotion recognition intelligent furniture

Feb.2023 – Jun .2023

- Built a CNN to achieve audio emotion recognition, classifying six emotions with an AUC score of 0.912 and invoked an interface to implement semantic emotion recognition, fused the recognition results using a multi-layer perceptron, and applied them to adjust the operating status of simulated furniture
- Selected for the "New Engineering Education Course Learning Works Exhibition"

Multi-modal medical data fusion method based on image-text contrastive learning

Dec.2023 – Now

- Extracted PET imaging features and used ensemble learning methods to conduct fine-grained analysis of LGI1 encephalitis and its epilepsy symptoms, with an AUC score of 0.988
- Proposed a medical multimodal model achieving the fusion of multiple medical imaging modalities and text
- Wrote a paper titled "Biomarker Importance Analysis for Autoimmune Encephalitis with PET" as the first author for submission

Out-of-Distribution Detection in Continuous Learning Scenarios

Jan.2024 – Now

- Proposed a new scenario for OOD detection, and implemented various detection methods, including classifier two-sample test, energy score, cosine similarity, and online/offline updates for continuous learning

HONORS & AWARDS

National Scholarship

Dec.2022

National Scholarship

Dec.2023

National Third Prize | National English Competition for College Students

Jun.2023

National Third Prize | National English Competition for College Students

Jun.2024

National Third Prize | "Datang Cup" National College students New generation Information and Communication Technology Competition

Aug.2023

Provincial First Prize | Sichuan Embedded Design Competition for College students

Sep.2023

Provincial Second Prize | the Chinese Mathematics Competitions

Mar.2023