Shen Ou-yang

Nanjing University Xianlin Campus, 163 Xianlin Road, Qixia District, Nanjing

→ +86-13376064311 shen.ouy03@gmail.com github.com/yunzinan yunzinan.top

"Everything we imagine will turn into reality."

Education

Nanjing University, Nanjing, China

Computer Science and Technology

Nanjing University, Nanjing, China

Applied Chemistry*

Sept. 2023 - Present

GPA: 4.59/5 Rank: 6/227

 $\mathbf{Sept.}\ \ \mathbf{2021}-\mathbf{June.}\ \ \mathbf{2023}$

GPA: 4.53/5 Rank: 5/119

*My major was adjusted to Chemistry and Life Sciences when I first enrolled in university. During the first two years of my undergraduate studies, I studied Applied Chemistry and Computer Science and Technology. Afterwards, I switched majors to study Computer Science.

Research Interests

- Brain-Computer Interface
- Machine Learning

- Artificial Intelligence
- Neuroscience

Research Experiences

Scientific Research Intern Course

 $\mathbf{July}\ \mathbf{2023} - \mathbf{Present}$

Supervised by Dr. Guihuan Feng, Software Institute in Nanjing University

- A compulsory course for CS students that allows them to freely choose research directions and mentors based on their personal interests.
- Developing an understanding of the background and fundamental knowledge of brain-computer interfaces (BCIs) by engaging with the literature.
- Trying to master the fundamental EEG-based BCI techniques and learning to apply machine learning for signal analysis and recognition through project-based practice.
- Leading a National College Students' Innovation training program.

Machine Learning: Mathematical Foundation and Applications

Jan. 2024 – Feb. 2024

Remote Research Program

Mentored by Pf. Hien Tran at NC State University

- Learn about the mathematical background of several supervised learning models.
- Apply several deep learning models(GRU/LSTM/EEG-Conformer) for EEG-based Emotion Recognition.

Projects

EEG-Based Brain-Computer Interaction in Virtual Reality | BCI, AI, VR | 9 link

Sept. 2023 - Dec. 2024

- Hosted as a National College Students' Innovation training program.
- Currently on the stage of planning & preparation.
- Aiming to
 - * a) Enhance the interactive experience by integrating brain-computer interface (BCI) technology into virtual reality (VR).
 - * b) Develop BCI technology that benefits the general public by utilizing VR as an application scenario.

Skills

Programming: C/C++, Python, PyTorch, Linux, MATLAB

Language: Chinese(Native), English(Fluent, CET-6 618, TOEFL 103(Speaking:25))

Honors & Awards

- the People's Scholarship $(\leq 20\%)$, Nov. 2023
- CCF-CSP top 6.8%, Dec.2023
- Nanjing University Collegiate Programming Contest, Silver Medal(div.2), rk.7(11%), May.2023
- LeetCode Cup 2023 Spring Programming Contest, top 4%, May.2023
- Nanjing University Collegiate Programming Contest, Silver Medal(div.2), rk.9(13%), May.2022

^{*}In the first two years before I transferred to the Computer Science Department, I was not qualified for a scholarship for not completing some of the chemistry major courses on time.