

Experiences

Intern of Scientist Team

Appier Inc.

Taipei, Taiwan

November 2023 - Present

- Re-implementation of generative AI methods and imaging analysis algorithms.
- Conducted in-depth research to assess the feasibility of integrating re-implemented methods into marketing products.
- Collaborate with data scientist team to develop proof-of-concept demos, demonstrating the potential of the re-implemented methods as valuable additions to the company's marketing services.

Research Student of N123 Lab

Institute of Biomedical Sciences (IBMS), Academia Sinica

Taipei, Taiwan

June 2023 - Present

- Proficiently conducted data science and in-depth analysis of magnetic resonance imaging (MRI) data, with a specific focus on brain connectome research.
- Development of cutting-edge analysis software, and cloud computing infrastructure deployment to optimize data storage and accessibility.
- Actively engaged in advanced studies encompassing neuroimaging, biomedical sciences, and neurosciences, consistently staying abreast of the latest research and breakthroughs in these fields.

Research Assistant of Dr. Jie-Fan Chang Lab

Department of Computer Science & Information Engineering, National Taiwan University

Taipei, Taiwan

September 2022 - Present

- Actively participated in research projects upon developing advanced algorithms for medical image analysis, specializing in neuroimaging scans.
- Conducted experiments to optimize machine learning and deep learning models, notably improving accuracy and efficiency through techniques such as hyperparameter tuning, model design, and data augmentation.
- Proficiently preprocessed and augmented medical imaging datasets to bolster model robustness, employing methods such as image normalization, noise reduction, and data augmentation to ensure high-quality input data.

Founder & Data Engineer

Taiwan Open Education Development Unit

Taiwan (Hybrid)

June 2021 - Present

- Led a team to develop and launch the CourseAPI platform, streamlining course information and accessibility.
- Developed efficient data scraper tools, automating data collection and analysis processes.
- Conducted regular maintenance to ensure the CourseAPI platform's optimal performance and data accuracy.
- Conducted in-depth analysis of issues related to open educational resources and open source education.

Development Skills

- **Front-End Development:** HTML, CSS, JavaScript, Bootstrap, Tailwind, React.js, Vue.js
- **Back-End Development:** Express.js, Django, Flask
- **Software Development:** Python, C, C++, Kotlin
- **Data Analysis:** R, MATLAB, SPSS, FSL, AFNI, ITK, VTK
- **Machine Learning / Deep Learning:** Sci-kit Learn, PyTorch, Tensorflow, Keras
- **Databases:** PostgreSQL, MongoDB, MariaDB, MySQL
- **Cloud Services:** AWS, GCP, Microsoft Azure, OpenStack
- **Operating Systems:** Linux, Unix, Windows

Summary

I am a high school freshman and results-driven professional with a passion for data science, advanced research, and technology development. Over the years, I have honed my skills and expertise through diverse experiences in research and technology leadership roles. My journey encompasses cutting-edge research in magnetic resonance imaging (MRI) data analysis, pioneering work in medical image analysis, and the development of innovative platforms for open education. I bring a robust skill set that spans data science, software development, and cloud infrastructure management, making me a versatile and dynamic contributor to any team or project. My commitment to staying at the forefront of emerging trends and technologies in fields such as neuroimaging, data engineering, and open education ensures that I am well-prepared to tackle complex challenges and drive innovation in the ever-evolving landscape of science and technology.

Education

Taipei Digital Experimental High School (T-School)

Experimental Education

Taipei City, Taiwan

2023 - Present

- Student Representative of 2nd Student Union
- Courses: Biomedical Science Research, Computer Programming in Python, Academic Research of Computer Science and Biomedical Informatics

New Taipei Municipal Yonghe Junior High School

Gifted and Talented Science Program

New Taipei City, Taiwan

2020 - 2023

- Valedictorian of 53rd Graduates with Highest Achievements
- Class President of Gifted and Talented Science Program
- School President of Academic Year 2023

Honors

- **Excellence Award of 2019 New Taipei City Individual Research Joint Presentation**
Issued by Department of Education, New Taipei City Government
- **Excellence Award of 2020 New Taipei City Science Fair**
校園速度偵測系統：應用 NodeMCU 與 OpenCV 作為 AI 物件辨識之研究
Issued by Department of Education, New Taipei City Government
- **High Distinction Award of 2021 New Taipei City Science Fair**
Representative Study of New Taipei City in National Fair
Issued by Department of Education, New Taipei City Government
- **Third Place of 62nd National Primary & High School Science Fair (NPHSSF)**
以新建構之卷積神經網路對腦部核磁共振影像執行多發性硬化症之判讀
Issued by National Taiwan Science Education Center
- **High Distinction Award of 2022 Young Talent Intelligence Technology Camp**
A High Scalability Method for MS Lesion Segmentation with FLAIR MRI on Embedded System Based on CNN
Issued by National Taiwan Science Education Center, National Taiwan University Department of Electrical Engineering
- **Awardee of 2023 Becoming Aces Nomination**
Issued by TLN Mediagene 2023 Becoming Aces Team

Additional

Languages

- **Mandarin, Taiwanese:** Native Proficiency
- **English:** Professional Working Proficiency (TOEIC 800, Nov. 2019)
- **Spanish:** Limited Working Proficiency

Voluntary Experience

- Lecturer of g0v Sch001 Open Source / Civic Tech Education Project
- Agenda Team of Hacks In Taiwan Conference (HITCON) 2023
- Co-Founder and General Coordinator of Computer Informatics Students Conference (CISCON) 2023
- Coordinator of Conference for Open Source Coders, Users, and Promoters (COSCUP) Open Education Track 2023
- Conference Streaming of Conference for Open Source Coders, Users, and Promoters (COSCUP) 2021
- Certified Senior Open Source Contributor (OSCVPass Program) of Open Culture Foundation
- Technical advisor of several open source projects and communities