# Jiashuo CHANG

Email: <u>2542762@dundee.ac.uk</u> | Phone: +86-18706828316 Add.: Building 7, Fengyuan Community, No. 38 Taoyuan South Road, Lianhu District, Xi'an, Shaanxi Province, 710077, P.R.China.

### ACADEMIC BACKGROUND

# **Central South University**

China

## Bachelor's Degree will be awarded in July 2026

09/2022-07/2026

- Major: Computer Science and Technology
- School: Dundee International Institute of Central South University (DIICSU)
- **GPA:** 90.66 / 100 **Rank:** 13 / 60
- Major Courses: Multi-paradigm Programming and Data Structures, Mathematical Logic in Computing Algorithms and Artificial Intelligence, Networks and Data Communications, Database Systems, etc.

### **University of Dundee**

UK

# Bachelor's Degree will be awarded in July 2026

09/2022-07/2026

- Major: Computing Science
- School: Dundee International Institute of Central South University (DIICSU)

#### PROJECTS & ACADEMIC RESEARCH

# ❖ MMP-2K: A Benchmark Multi-Labeled Macro Photography Image Quality Assessment Database Supervisor: Prof. Hanhe Lin (UoD) 02/2024-01/2025

- **Research Content:** The research focuses on creating a large-scale multi-labeled macro photography image quality assessment (MPIQA) database, MMP-2k, to address the lack of MPIQA data and provide a foundation for improving quality evaluation metrics for macro photography.
- Key Contributions: (Co-first Author & Core Research Member)
- ♦ Dataset construction and annotation:
  - Designed the structure of the dataset and designed and participated in the procedure of data annotation to ensure high data quality and usability.
- ♦ Full-Stack Platform Development:
  - Developed front-end design using Vue.js to create an intuitive user interface, enabling researchers to easily browse and go through all subjective studies;
  - Implemented back-end functions for data storage and retrieval using Python with Flask framework.
- ♦ Performance Optimization and Technical Problem-Solving:
  - Participated in optimizing system performance and resolving technical challenges, ensuring the platform could perfectly record all rates and annotations and respond efficiently.
- Research Result:

The project has been accepted by the *IEEE International Conference on Image Processing, IEEE ICIP* 2025, with the dataset now publicly available on GitHub and Huggingface.

GitHub Repository Link: Future-IQA/MMP-2k

Huggingface Link: <a href="https://huggingface.co/datasets/MMP-2k/MMP-2k/MMP-2k">https://huggingface.co/datasets/MMP-2k/MMP-2k</a>

Paper available at: [2505.19065] MMP-2K: A Benchmark Multi-Labeled Macro Photography Image Quality Assessment Database

Supervisor: Prof. Xiang 'Anthony' Chen (UCLA)

- Research Content: The project aimed to design and develop an AI Psychological Assistant capable of identifying user emotions and providing personalized mental health support based on real-time interaction data and user feedback.
- Key Contributions: (Team Leader)
- ♦ Conducted user needs research and participatory design;
- ♦ Organized team members and coordinated tasks across all phases.
- Research Result:

Published a paper titled *PSYNAV*: Exploring User Needs and Expectation and Designing AI Psychological Assistants at the 2025 IEEE 7th International Conference on Artificial Intelligence, Computer Science and Information Processing (AICSIP 2025).

❖ Artificial Intelligence and Machine Learning (AI-ML) (National University of Singapore)
 O1/2024
 Supervisor: Prof. Mehul Motani (NUS)

- **Research Content:** This project utilized machine learning techniques to predict population trends in Singapore and China.
- Key Contributions: (Team Leader)
- ♦ Gained in-depth knowledge of machine learning concepts such as regression and classification, and became familiar with foundational machine learning algorithms;
- ♦ Participated in the development and optimization of the predictive model, ensuring its accuracy and reliability.
- Research Result:

Achieved a certain level of accuracy in predicting population trends using real-world demographic datasets; project outcomes demonstrated the practical value of machine learning in socio-economic forecasting.

### **PUBLICATIONS**

- PSYNAV: Exploring User Needs and Expectation and Designing AI Psychological Assistants (Author)

  Accepted by 2025 IEEE 7th International Conference on Artificial Intelligence, Computer Science and Information Processing (AICSIP 2025) in April 2025
- MMP-2K: A Benchmark Multi-Labeled Macro Photography Image Quality Assessment Database (Author)

Available at: <a href="https://arxiv.org/abs/2505.19065">https://arxiv.org/abs/2505.19065</a>

Accepted by IEEE International Conference on Image Processing, IEEE ICIP 2025 in May 2025

# **EXTRACURRICULAR ACTIVITIES**

Contestant, The "Jisi Cup" College Student Research-Oriented Learning Achievement Competition

06/2024

Contestant, The 15<sup>th</sup> China Collegiate Service Outsourcing Innovation & Entrepreneurship Competition--Hanson Software Central China Regional Division 12/2023-06/2024

Volunteer, Xi'an Recruitment and Promotion Team, Central South University

12/2022-Present

Organization and Publicity Coordinator, Class D2201, Dundee International Institute of Central South University

09/2022-Present

### **INTERNSHIP EXPERIENCE**

**Intern Backend Developer** 

Photovoltaic & Energy Storage Products Department of Xi'an R&D Center <u>EAST Energy Storage Technology Co., Ltd</u> 07/2024-09/2024

> Contributed to AI integration for the platform by designing and developing both voice recognition and facial recognition login systems using Baidu AI Cloud API, enhancing user experience and platform security;

- ➤ Participated in the back-end design and implementation of voice recognition and facial recognition features using Python with Flask Framework, ensuring the system's efficient and stable operation;
- > Engaged in data processing and system performance optimization work;
- Enhanced programming skills, accumulated practical experience in applying AI technology in actual products, and strengthened system development and implementation capabilities.

## **AWARDS & SKILLS & INTERESTS**

# **A** Languages:

IELTS: 7.0 (L: 8.5; R: 7.5; W:6.0; S: 6.0) CET (College English Test ) 4 589/710 CET (College English Test ) 6 515/710

- ❖ Computer Skills: Word, PPT, Excel, Java, C, C++, Python, HTML, JavaScript, CSS, Bash, Flask, Vue, ElementUI
- ❖ Interests: Reading, Playing Football, Photography, Fine Arts
- **❖** Honours/Awards:

Third-Class Scholarship of Central South University in the Academic Year 2023-2024

Third Prize in the 15<sup>th</sup> China Collegiate Service Outsourcing Innovation & Entrepreneurship Competition--Hanson Software Central China Regional Division

06/2024

Third Prize in the "Jisi Cup" College Student Research-Oriented Learning Achievement Competition 01/2024

Third-Class Scholarship of Central South University in the Academic Year 2022-2023

11/2023

Excellent Student Leader, Central South University in the Academic Year 2022-2023

10/2023