# JIE HUANG

#### Personal Data

GENDER: Male
NATIONALITY: Chinese

DATE OF BIRTH: 1st February 1993

ADDRESS: N21-1012, University of Macau, Avenida da Universidade, Taipa, Macau, China

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#### **EDUCATION**

09/2018-06/2021 | M.S. in Condensed Matter Physics & Machine Learning

Wenzhou University, Wenzhou, China, Supervisor: Prof. Dr. Shiben Li

Thesis: "Applications of machine learning in hydrogen-bond dynamics in bulk

water and polymer chains' structure factor"

GPA: 3.84/4.0

05/2018–12/2019 | Visiting student, Center of Soft Matter Physics and its Applications

Beihang University, Beijing, China. Supervisor: Prof. Dr. Ying Jiang

09/2012-06/2016 | B.S. in Electronic Information Engineering,

China West Normal University, Nanchong, China

Thesis: "A CCD translation device based on Raspberry Pi"

GPA: 3.22/4.0

#### SCIENTIFIC PUBLICATIONS

1. Gang Huang\*, **Jie Huang**, Thickness of the air-water interface from first-principles simulation-based hydrogen bond dynamics, arXiv:2204.13941, **2022** 

- 2. **Jie Huang**, Gang Huang\*, and Shiben Li\*, A machine learning model to classify dynamic processes in liquid water, **ChemPhysChem** 23, DOI: 10.1002/cphc.202100599, **2022**, **Cover Article**
- 3. **Jie Huang**, Shiben Li\*, Xinghua Zhang\*, and Gang Huang, Neural network model for structure factor of polymer systems, **The Journal of Chemical Physics** 153, DOI: 10.1063/5.0022464, **2020**

#### INVITED TALK

1. Academic research experience sharing for postgraduates on **National Science and Technology Talents Day**, School of Mathematics and Physics, Wenzhou University, 2021

#### **WORK EXPERIENCE**

07/2022 - now

Research Assistant, Institute of Applied Physics and Materials Engineering, University of Macau, Macau, China. Supervisor: Prof. Dr. Yongqing Cai

05/2018 - 12/2019

Visiting Student, Center of Soft Matter Physics and its Applications, **Beihang University**, Beijing, China. Supervisor: Prof. Dr. Ying Jiang

- 1. **Teaching assistant** for the undergraduate course "C Programming Language"
- 2. **System manager** of the Linux cluster at Center of Soft Matter Physics, Collaborator: Dr. Tao Huang
- 3. Solving diffusion equations and finding critical points of polymer systems using unsupervised learning
- 4. Corneal image classification and keratoconus detection using convolutional neural networks (CNN), Collaborator: Prof. Dr. Meixiao Shen

09/2016 - 04/2018

Software Engineer, FalconPro Technology Co., Ltd, Shanghai, China

- 1. Image processing & Barcode decoding
- 2. Embedded systems programming

#### AWARDS/HONOR

- Cover Article, ChemPhysChem, Volume 23, Issue 1
   Outstanding Graduate of Wenzhou University (only one of 65 students)
   Award for Excellent Scientific and Technological Innovation (only one of 1176 students)
   National Scholarship, Ministry of Education of China (only two of 65 students)
   First-grade Scholarship for scientific research, Wenzhou University (only five of 65 students)
   Award for The Best Team Member, Falconpro
   Award for The Most Creative Employee, Falconpro
   National Undergraduate Electronic Design Contest (TI Cup) Second Prize
- 2015 | National Professional Software Engineering Design Contest (Bule Bridge Cup) Second Prize

#### **CERTIFICATES**

2021   IELTS ACADEMIC: Overall Band Score 6.0
2018   College English Test Band 6 (CET-6): Score 513
2018   MOOC certificate from Peking University: Artificial Intelligence Practice
2016   edX certificate from the University of Texas at Austin: Embedded Systems
2015   National Electronics Professionals: Senior Development Engineer of MCU Application
2014   MOOC certificate from <b>Harbin Institute of Technology</b> : Python Programming Language
2014   National Computer Rank Examination Level 3: Embedded System Development
2014   National Computer Rank Examination Level 2: The C Programming Language

## **SKILLS**

Python, Tensorflow, C, LAMMPS, CP2K, Linux, Shell, Embedded Systems Programming, Git

## **ACTIVITIES**

2021/11	Teaching "Introduction to Deep Learning" for postgraduates in Physics , Wenzhou University.
2020/06	Creator of the Soft Matter Online Discussion Group, Wenzhou University
09/2019 - 11/2019	Teaching assistant for "C programming language", Beihang University
05/2018 - 11/2019	System manager of the Linux cluster, Beihang University

## HOBBY PROJECTS

2022   Generate Music From Scratch Using Python
2020   Adversarial Inverse Reinforcement Learning Implementation for Mountain Car
2019   Steady Hand Game Device Based on Raspberry Pi
2016   Handheld Game Console Based on Texas Instruments TM4C123G

Last updated: September 5, 2022