

# 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  
 EMAIL: [jiehuang@um.edu.mo](mailto:jiehuang@um.edu.mo)  
 WEBSITE: <https://www.way2ml.com>

## EDUCATION

---

09/2018–06/2021	M.S. in <b>Condensed Matter Physics &amp; Machine Learning</b> Wenzhou University, Wenzhou, China, Supervisor: Prof. Dr. Shibei Li Thesis: “ <a href="#">Applications of machine learning in hydrogen-bond dynamics in bulk water and polymer chains’ structure factor</a> ” <b>GPA: 3.84/4.0</b>
05/2018–12/2019	Visiting student, Center of Soft Matter Physics and its Applications <b>Beihang University</b> , Beijing, China. Supervisor: Prof. Dr. Ying Jiang
09/2012–06/2016	B.S. in <b>Electronic Information Engineering</b> , China West Normal University, Nanchong, China Thesis: “ <a href="#">A CCD translation device based on Raspberry Pi</a> ” <b>GPA: 3.22/4.0</b>

## 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 Shibei 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**, Shibei 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, <b>University of Macau</b> , Macau, China. Supervisor: <a href="#">Prof. Dr. Yongqing Cai</a>
05/2018 - 12/2019	Visiting Student, Center of Soft Matter Physics and its Applications, <b>Beihang University</b> , Beijing, China. Supervisor: Prof. Dr. Ying Jiang 1. <b>Teaching assistant</b> for the undergraduate course “C Programming Language” 2. <b>System manager</b> of the Linux cluster at Center of Soft Matter Physics, Collaborator: <a href="#">Dr. Tao Huang</a> 3. <b>Solving diffusion equations</b> and <b>finding critical points</b> of polymer systems using <b>unsupervised learning</b> 4. <b>Corneal image classification</b> and keratoconus detection using <b>convolutional neural networks (CNN)</b> , Collaborator: Prof. Dr. Meixiao Shen
09/2016 - 04/2018	<b>Software Engineer</b> , FalconPro Technology Co., Ltd, Shanghai, China 1. <b>Image processing &amp; Barcode decoding</b> 2. <b>Embedded systems programming</b>

## AWARDS/HONOR

---

2022	<b>Cover Article</b> , ChemPhysChem, Volume 23, Issue 1
2021	<b>Outstanding Graduate</b> of Wenzhou University (only one of 65 students)
2021	Award for <b>Excellent Scientific and Technological Innovation</b> (only one of 1176 students)
2020	<b>National Scholarship</b> , Ministry of Education of China (only two of 65 students)
2020	<b>First-grade Scholarship</b> for scientific research, Wenzhou University (only five of 65 students)
2018	Award for <b>The Best Team Member</b> , Falconpro
2017	Award for <b>The Most Creative Employee</b> , Falconpro
2015	<b>National Undergraduate Electronic Design Contest (TI Cup)</b> <b>Second Prize</b>
2015	<b>National Professional Software Engineering Design Contest (Bule Bridge Cup)</b> <b>Second Prize</b>

## CERTIFICATES

---

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

## 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 24, 2022