

JIE HUANG

PERSONAL DATA

GENDER:	Male
NATIONALITY:	Chinese
DATE OF BIRTH:	1st February 1993
ADDRESS:	Kide 2501, Department of Applied Physics, Aalto University, Finland
EMAIL:	jie.huang@aalto.fi
WEBSITE:	https://way2ml.github.io

EDUCATION

05/2023–now	Doctoral Researcher in Applied Physics Aalto University, Helsinki, Finland, Advisor: Prof. Adam S. Foster
09/2018–06/2021	M.S. in Condensed Matter Physics Wenzhou University, Wenzhou, China, Advisor: Prof. Shibei Li Thesis: “ Applications of machine learning in hydrogen-bond dynamics in bulk water and polymer chains’ structure factor ” GPA: 3.84/4.0
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

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1. Gang Huang and Jie Huang*, [Revisiting the Thickness of the Air-Water Interface from Two Extremes of Interface Hydrogen Bond Dynamics](#), **Journal of Chemical Theory and Computation**, DOI: 10.1021/acs.jctc.4c00457, 2024
 2. Jie Huang, Bowen Wang, Hejin Yan and Yongqing Cai*, [Mechanism of interaction of water above the methylammonium lead iodide perovskite nanocluster: size effect and water-induced defective states](#), **The Journal of Physical Chemistry Letters** 15, DOI: 10.1021/acs.jpclett.3c02807, 2024
 3. 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**
 4. 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

WORK EXPERIENCE

07/2022 - 04/2023	Research Assistant, Institute of Applied Physics and Materials Engineering, University of Macau , Macau, China. Advisor: Prof. Yongqing Cai 1. Density Functional Theory Study of Perovskite Nanoclusters in Aqueous Environment
09/2016 - 04/2018	Software Engineer , FalconPro Technology Co., Ltd, Shanghai, China 1. Image processing & Barcode decoding 2. Embedded systems programming

AWARDS/HONOR

- 2021 | **Outstanding Graduate** of Wenzhou University (one of 65 students)
- 2021 | Award for **Excellent Scientific and Technological Innovation** (one of 1176 students)
- 2020 | **National Scholarship**, Ministry of Education of China (two of 65 students)
- 2020 | **First-grade Scholarship** for scientific research, Wenzhou University (five of 65 students)
- 2015 | **National Undergraduate Electronic Design Contest (TI Cup)** **Second Prize**
- 2015 | **National Professional Software Engineering Design Contest (Bule Bridge Cup)** **Second Prize**

CERTIFICATES

- 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 | **National Computer Rank Examination Level 3**: **Embedded System Development**

SKILLS

Python, Machine Learning, Git, C, LAMMPS, CP2K, VASP, Linux, Embedded Systems Programming

LANGUAGES

Chinese (native), English (proficient), Japanese (basic)

ACTIVITIES

- 2021/11 | Teaching "**Introduction to Deep Learning**" for postgraduates in Physics , Wenzhou University.
- 2020/06 | Creating 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 | **Guitar Simulations From Wave Equations**: **Music Demo**
- 2022 | **Huanbu**: A cross-platform and full functional metronome app based on Python
- 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 28, 2024