Jie Huang

Personal Data

Gender:	Male
Nationality:	Chinese
Date of Birth:	1st February 1993
Address:	Y430c, Department of Applied Physics, Aalto University, Finland
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Education

05/2023–now	Doctoral Researcher in **Applied Physics** Aalto University, Espoo, Finland, Advisor: Prof. Adam S. Foster
09/2018–06/2021	M.S. in **Condensed Matter Physics** Wenzhou University, Wenzhou, China, Supervisor: Prof. Shiben 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

1. **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**
2. **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**

Work Experience

07/2022 - 04/2023	Research Assistant, Institute of Applied Physics and Materials Engineering, **University of Macau**, Macau, China. Supervisor: Prof. Yongqing Cai 1. Density Functional Theory Study of Perovskite Nanoclusters in Aqueous Environment
05/2018 - 12/2019	Visiting Student, Center of Soft Matter Physics and its Applications, **Beihang University**, Beijing, China. Supervisor: Prof. 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**
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, **Tensorflow**, C, **LAMMPS**, **CP2K**, Linux, **Embedded Systems Programming**, Git

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: June 20, 2023