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. 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**, Bowen Wang, Hejin Yan, 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.3co2807, **2024**

- 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**

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 (Tl 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

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