

HUI(NORBERT) ZHENG

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RESEARCH INTERESTS

- **Neuroscience:** Computational Neuroscience; Reinforcement Learning

EDUCATION

Peking University

Ph.D in Biology, Academy for Advanced Interdisciplinary Studies

Beijing, China

Sept. 2021 - Present

- **Advisor:** Dr. Yunzhe Liu

Wuhan University

B.S in Computer Science and Technology, Hongyi Honor College

Wuhan, China

Sept. 2017 - Jun. 2021

- **GPA:** 3.84/4.00(92.1/100)
- **Rank:** 2/32(selected from 363 students in School of Computer Science, Wuhan University)
- **Exchange:** Visiting Student at University of California, Berkeley(2019 summer)

RESEARCH EXPERIENCE

Peking University, Beijing, China

Research Assistant

Advisor: Dr. Yunzhe Liu

Oct. 2021 - Present

- Researched the role of replay for memory consolidation.
- Build a machine replicate the replay observed in both human and rodent.

Peking University, Beijing, China

Research Assistant

Advisor: Dr. Si Wu

Mar. 2021 - Aug. 2021

- Researched the global to local information processing.
- Analyzed the dynamics of the neural network model with gap junction.

Tsinghua University, Beijing, China

Research Assistant

Advisor: Dr. Minmin Luo

Sept. 2020 - Mar. 2021

- Researched the role of pituitary cells in systemic neuroinflammation at the single-cell transcriptome level.
- Revealed the transcriptional differences of different types of pituitary cells in the process of central nervous endocrine inflammation regulation.

Tsinghua University, Beijing, China

Research Assistant

Advisor: Dr. Bin Liu

May. 2020 - Aug. 2020

- Researched the real-time processing of autonomous driving in the Internet of Vehicles.
- Designed efficient algorithms for the novel TCAM-NMC in-network accelerator, which accelerates the MEC-assisted similar 3D object detection for autonomous driving.

Wuhan University, Wuhan, China

Research Assistant

Advisor: Dr. Haojun Ai

Feb. 2020 - Apr. 2020

- Researched transfer learning in Air-Writing.
- Developed a system that could transfer between different people.

AWARDS AND HONORS

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| Outstanding Graduate (12 out of 127, 10%), Wuhan University | Apr. 2021 |
| National Scholarship, Wuhan University | Oct. 2020 |
| Excellent Student Scholarship (Rank: 1/32), Wuhan University | Oct. 2020 |
| National Second Prize of FPGA Innovation Design Competition, China | Dec. 2019 |
| National Second Prize of Intelligent Robot Fighting Competition, China | Oct. 2019 |
| Excellent Student Scholarship (Rank: 4/32), Wuhan University | Oct. 2019 |
| Excellent Student Scholarship (Rank: 8/32), Wuhan University | Oct. 2018 |
| Freshman Scholarship, Wuhan University | Oct. 2017 |

PUBLICATIONS

* indicates equal contribution.

- Yunzhe Li*, **Hui Zheng***, He Zhu*, Haojun Ai and Xiaowei Dong. "Cross-People Mobile-Phone Based Airwriting Character Recognition". ICPR2020 Accepted.
- Wenquan Xu, Haoyu Song, Linyang Hou, **Hui Zheng**, Xinggong Zhang, Chuwen Zhang, Wei Hu, Yi Wang, Bin Liu. "SODA: Similar 3D Object Detection Accelerator at Network Edge for Autonomous Driving". INFOCOM2021 Accepted.