

# Zhenjun Zhao

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## Education

2019.8 – now    **The Chinese University of Hong Kong**    **Hong Kong SAR**

*PhD at Department of Mechanical and Automation Engineering*

- Research interests include robust pose estimation, feature detection/description/matching and visual localization in challenging environments for drones and vehicles.

2012.9 – 2015.4    **Nanjing University of Aeronautics and Astronautics**    **Nanjing, CHN**

*Master at College of Automation Engineering*

- Master of Science: Navigation, Guidance and Control granted in April 2015.
- GPA: 3.76/4.00; Rank: 2/38.

2008.9 – 2012.6    **Nanjing University of Aeronautics and Astronautics**    **Nanjing, CHN**

- Bachelor of Engineering: Automation Engineering granted in June 2012.
- GPA: 3.70/4.00; Rank: 6/155.

## Internship Experience

2020.6 – 2020.11    **Orbbec Technologies**    **Shenzhen, CHN**

*3D Vision Department*

- Research on visual-inertial odometry initialization.
- Develop light-weight visual-inertial odometry initialization and optimization in mobile devices.

2021.3 – 2022.12    **Peng Cheng Laboratory**    **Shenzhen, CHN**

*Mathematics and Theory Department*

- Research on pose estimation and visual localization in underwater environments.
- Research on local feature extraction in underwater environments.

## Professional Experience

2018.11 – 2019.7    **The Chinese University of Hong Kong**    **Hong Kong SAR**

*Department of Mechanical and Automation Engineering*

- Research on visual-inertial odometry for unmanned aerial vehicle.
- Integrated PX4 and MSF to build a loosely-coupled visual-inertial odometry for unmanned aerial vehicle.

2015.4-2016.6 **Huawei Technologies**

**Hangzhou, CHN**

*Software Engineer, the Security Gateway Development Division*

- Develop and maintain virtual system, intelligent routing, mail filtering and north direction in Huawei's first visualized software firewall (VFW).
- Develop and maintain virtual machine migration and policy optimization in Huawei's visualized network security product (NGFW).
- Lead the project of Huawei's first firewall simulation tool targeting at corporate users, trainees and examinees.

**Awards**

PhD Scholarship, CUHK, 2019-2023

Huawei Annual Research Director Award (top 2 at Hangzhou Branch), Huawei, 2016

Graduate Prize Fellowship, NUAA, 2012-2015

Undergraduate Academic Scholarship, NUAA, 2008-2012

**Publications:**

**Zhenjun Zhao** and Ben M. Chen, Benchmark for Initialization of VIO, *Chinese Control Conference (CCC)*, 2023.

Junjie Wen, Jinqiang Cui, **Zhenjun Zhao**, Ruixin Yan, Zhi Gao, Lihua Dou, Ben M. Chen, SyreaNet: A Physically Guided Underwater Image Enhancement Framework Integrating Synthetic and Real Images, *International Conference on Robotics and Automation (ICRA)*, 2023.

Haoang Li, Ji Zhao, Jean-Charles Bazin, Pyojin Kim, Kyungdon Joo, **Zhenjun Zhao**, Yun-Hui, Liu, Hong Kong World: Leveraging Structural Regularity for Line-based SLAM, *Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, 2023.

**Zhenjun Zhao**, Yu Zhai, Ben M. Chen, Peidong Liu, BALF: Simple and Efficient Blur Aware Local Feature Detector, *arXiv preprint arXiv:2211.14731* (2022).

**Zhenjun Zhao**, Pose Graph Registration for Visual Localization, *International Conference on Robotics and Automation (ICRA)*, 2024 (Under review).