

# YIJUN YUAN

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<https://jarrome.github.io>

## EDUCATION

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**Julius Maximilian University of Würzburg, Germany**

*October 2021 - Present*

Ph.D, advised by Prof. **Andreas Nüchter**

**ShanghaiTech University, China**

*September 2018 - June 2021*

M.E., Computer Science and Technology

**Outstanding Graduation.** GPA: 3.5/4.0

MARS Lab, advised by Prof. **Sören Schwertfeger**

**ShanghaiTech University, China**

*September 2014 - June 2018*

B.E., Computer Science and Technology.

GPA: 3.69/4.0

## RESEARCH

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1. **Yuan, Y.**, & Nuechter, A. (2023). Uni-Fusion: Universal Continuous Mapping. arXiv preprint arXiv:2303.12678.
2. **Yuan, Y.**, & Nchter, A. (2023). Online Learning of Neural Surface Light Fields Alongside Real-Time Incremental 3D Reconstruction. IEEE Robotics and Automation Letters (RAL).
3. **Yuan, Y.**, & Nchter, A. (2022), An Algorithm for the SE(3)-Transformation on Neural Implicit Maps for Remapping Functions, IEEE Robotics and Automation Letters (RAL).
4. **Yuan, Y.**, & Nchter, A. (2022), Indirect Point Cloud Registration: Aligning Distance Fields using a Pseudo Third Point Set, IEEE Robotics and Automation Letters (RAL).
5. Hou, J., **Yuan, Y.**, He, Z. & Schwertfeger, S. (2021). Matching Maps based on the Area Graph. Intelligent Service Robotics (JIST).
6. **Yuan, Y.**, Borrmann, D., Hou, J., Ma, Y., Nchter, A., & Schwertfeger, S. (2021). Self-supervised Point Set Local Descriptors for Point Cloud Registration. Sensors.
7. **Yuan, Y.**, Xu, Q., and Schwertfeger, S. (2020). Configuration-space Flipper Planning on 3D Terrain. In 2020 IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR).
8. Long, X., Xu, Q., **Yuan, Y.**, He, Z., and Schwertfeger, S. (2020). Improved Visual-Inertial Localization for Low-cost Rescue Robots. 21st World Congress of the International Federation of Automatic Control (IFAC-WC).
9. Hou, J., **Yuan, Y.**, and Schwertfeger, S. (2019). Area Graph: Generation of Topological Maps using the Voronoi Diagram. In 2019 19th International Conference on Advanced Robotics (ICAR).
10. **Yuan, Y.**, Wang, L., and Schwertfeger, S. (2019). Configuration-space flipper planning for rescue robots. In 2019 IEEE International Symposium on Safety, Security, and Rescue Robotics (SSRR).
11. **Yuan, Y.**, and Schwertfeger, S. (2019). Incrementally Building Topology Graphs via Distance Maps. In 2019 IEEE International Conference on Real-time Computing and Robotics (RCAR).
12. **Yuan, Y.**, Kuang, H., and Schwertfeger, S. (2018). Fast Gaussian Process Occupancy Maps. In 2018 15th International Conference on Control, Automation, Robotics and Vision (ICARCV).

## VISITING AND INTERN

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**Tencent Inc.**

*February 2021 - May 2021*

*3D Vision Engineer Intern*

**Julius Maximilian University of Würzburg, Germany**

*October 2019 - December 2019*

*Research visiting, advised by Prof. **Andreas Nüchter**, sponsored by DAAD scholarship*

**Nullmax Inc.**  
*Computer Vision Engineer Intern*

*February 2019 - May 2019*

## **AWARDS**

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**NO.4 in total score, Best on HPCG and Tensorflow**

June 2018

- ISC-HPC 2018 high performance competition, Frankfurt, Germany.

**DAAD-Short Term Scholarship**

August 2019

- German Academic Exchange Service

**Outstanding Graduation**

June 2021

- ShanghaiTech University, China