Regine Hartwig

"As an engineer, I want to develop new technologies to solve the problems of today."

Education

01/2019 – 05/2019	**Master of Science**, *Nanyang Technological University*, Singapore. Exchange Program
04/2017 – 05/2019	**Master of Science**, *Technical University*, Munich. Specialization in Automation and Robotics
10/2013 – 03/2017	**Bachelor of Science**, *Technical University*, Munich.
09/2003 – 06/2012	**Higher Education Entrance Qualification**, *Feodor-Lynen-Gymnasium*, Planegg.
09/1999 – 08/2003	**Transfer**, *Primary School*, Martinsried.

Experience

06/2022 – Now	**PhD Student**, *Computer Vision Group Technical University*, Munich. Computer Vision Group, Prof. Daniel Cremers
06/2019 – 05/2022	**Research Assistant**, *Research Hospital Technical University*, Munich. BMBF Project Compass: Navigation and Visualization in Minimally-Invasive Surgery
05/2018 – 12/2018	**Master Thesis**, *Arnold and Richter Cine Technology GmbH*, Munich. Investigation of Error Propagation in FPGA Implementation of Digital Video Signal Processing Pipeline
11/2016 – 03/2017	**Bachelor Thesis**, *Mercateo AG*, Munich. Statistical Modeling and Analysis of Information Spreading, Supervision: Prof. Dr. Martin Kleinsteuber, Chair of Machine Learning and Geometric Optimization

Publications

[1] Regine Hartwig et al. "Constrained Visual-Inertial Localization With Application And Benchmark in Laparoscopic Surgery". In: *Int. Conf. on Robotics and Automation (ICRA)*. IEEE, 2022. URL: https://arxiv.org/pdf/2202.11075.pdf.

[2] Dirk Wilhelm et al. "Ethical, legal and social implications in the use of artificial intelligence-based technologies in surgery: principles, implementation and importance for the user". In: *Der Chirurg; Zeitschrift Fur Alle Gebiete Der Operativen Medizen* 93.3 (2022), pp. 223–233.