

# Mengkun She

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EDUCATION	<b>Christian-Albrechts-Universität zu Kiel, Kiel, Germany</b> Nov 2020- Present <ul style="list-style-type: none"><li>▪ Ph.D. in Computer Science</li><li>▪ Topic: Underwater Refractive Camera Calibration and 3D Scene Reconstruction</li><li>▪ Adviser: Prof. Dr. -Ing. Kevin Köser</li></ul>
	<b>Chongqing University, Chongqing, China</b> Sep 2017- Jun 2020 <ul style="list-style-type: none"><li>▪ M.S. in Geoinformatics</li></ul>
	<b>Chongqing University, Chongqing, China</b> Sep 2013- Jun 2017 <ul style="list-style-type: none"><li>▪ B.S. in Surveying and Mapping Engineering (Geoinformatics)</li></ul>
RESEARCH EXPERIENCE	<b>Helmholtz Centre for Ocean Research, Kiel, GEOMAR,</b> Jan 2019- Jan 2020 <ul style="list-style-type: none"><li>▪ Research Intern<ul style="list-style-type: none"><li>• Project: BubbleBox - High-speed stereo camera system for seafloor bubble flow estimation</li><li>• Focus: Refractive underwater camera calibration; Stereo; Object detection and tracking in video.</li></ul></li></ul>
	<b>Helmholtz Centre for Ocean Research, Kiel, GEOMAR,</b> Nov 2020- Jun 2024 <ul style="list-style-type: none"><li>▪ Research Scientist<ul style="list-style-type: none"><li>• Project: Deep Quanticam - visual mapping and quantitative machine vision in the deep sea</li><li>• Focus: Refractive geometry; Navigation-aided SfM; Refractive SfM; Underwater NeRF.</li></ul></li></ul>
SELECTED PUBLICATIONS	<b>M. She, Y. Song, J Mohrmann, K. Köser.</b> Refractive COLMAP: Refractive Structure-from-Motion Revisited. In <i>IROS, 2024 (Oral)</i>
	<b>M. She, Y. Song, D. Nakath, K. Köser.</b> Semihierarchical Reconstruction and Weak-area Revisiting for Robotic Visual Seafloor Mapping. In <i>Journal of Field Robotics</i>
	<b>M. She, T. Weiß, Y. Song, P. Urban, J. Greinert, K. Köser.</b> Marine Bubble Flow Quantification Using Wide-baseline Stereo Photogrammetry. In <i>ISPRS Photogrammetry and Remote Sensing</i>
	<b>M. She, D. Nakath, K. Köser.</b> Refractive Geometry on Underwater Domes. In <i>ISPRS Photogrammetry and Remote Sensing</i>
	X. Weng*, <b>M. She*</b> , D. Nakath, K. Köser (*Equal Contribution). Macal - Macro Lens Calibration and the Focus Stack Camera Model. In <i>3DV, 2021 (Oral)</i>
	<b>M. She, Y. Song, J Mohrmann, K. Köser.</b> Adjustment and Calibration of Dome Port Camera Systems for Underwater Vision. In <i>GCPR, 2019 (Oral)</i>
AWARDS & SCHOLARSHIPS	<ul style="list-style-type: none"><li>▪ Doctoral scholarship granted by China Scholarship Council (CSC) 2020 – 2024</li><li>▪ Travel grant for young researchers by Deutsche Arbeitsgemeinschaft für Mustererkennung, DAGM 2019</li></ul>
SKILLS	C++, Python, PyTorch, Ceres-Solver, Linux
REFERENCES	<ul style="list-style-type: none"><li>▪ <b>Prof. Dr. -Ing. Kevin Köser</b> Professor of Computer Science Marine Data Science Group Christian-Albrechts-Universität zu Kiel Alexander-Behm-Haus - EG.011, Neufeldtstraße 6, Kiel, Germany Email: <a href="mailto:kk@informatik.uni-kiel.de">kk@informatik.uni-kiel.de</a></li><li>▪ <b>Dr. David Nakath</b> Postdoc at the Marine Data Science Group Christian-Albrechts-Universität zu Kiel Alexander-Behm-Haus, Neufeldtstraße 6, Kiel, Germany Email: <a href="mailto:dna@informatik.uni-kiel.de">dna@informatik.uni-kiel.de</a></li></ul>