

Zimin Xia

Nationality: Chinese

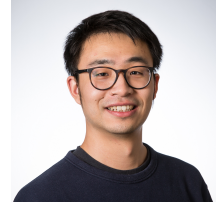
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Google Scholar: <https://scholar.google.com/citations?user=Wl7NqjoAAAAJ&hl=en>



RESEARCH INTERESTS

Visual Localization, Ground-to-Aerial Image Matching, 3D Computer Vision, Representation Learning, Self-Supervised Learning

EDUCATION

Delft University of Technology, The Netherlands Oct. 2019 - (EXP) Jan. 2024
Ph.D. student, topic: *Efficient Deep Learning for Localization and Mapping*
Supervisors: Dr. Julian F. P. Kooij, Prof. Darius M. Gavrilă
Collaborate with TomTom, Amsterdam, The Netherlands
Dutch Research Council funded project: Efficient Deep Learning

University of Stuttgart, Germany Oct. 2016 - Jul. 2019
Master of Science, Geomatics Engineering
Master Thesis at Carl Zeiss AG, Germany:
Stereo Reconstruction of Human Faces with Deep Learning

Wuhan University, China Sep. 2012 - Jun. 2016
Bachelor of Science, Geodesy and Geomatics Engineering

SELECTED PUBLICATIONS

Convolutional Cross-View Pose Estimation

Zimin Xia, Olaf Booij, Julian F. P. Kooij
(Under revision at IEEE Transactions on Pattern Analysis and Machine Intelligence)
Linked to: Paper, Code

SliceMatch: Geometry-guided Aggregation for Cross-View Pose Estimation

Ted Lentsch*, **Zimin Xia***, Holger Caesar, Julian F. P. Kooij
*: Equal contribution

Conference on Computer Vision and Pattern Recognition (CVPR), 2023
Linked to: Paper, Code, Video

Visual Cross-View Metric Localization with Dense Uncertainty Estimates

Zimin Xia, Olaf Booij, Marco Manfredi, Julian F. P. Kooij
European Conference on Computer Vision (ECCV), 2022
Linked to: Paper, Code, Video

Cross-View Matching for Vehicle Localization by Learning Geographically Local Representations

Zimin Xia, Olaf Booij, Marco Manfredi, Julian F. P. Kooij
IEEE Robotics and Automation Letters (IEEE RA-L), 2021
Linked to: Paper, Code, Video

Geographically Local Representation Learning with a Spatial Prior for Visual Localization

Zimin Xia, Olaf Booij, Marco Manfredi, Julian F. P. Kooij
European Conference on Computer Vision, 2020, Workshop on Map-based Localization for Autonomous Driving, Oral Presentation
Linked to: Paper, Code, Video

ACADEMIC ACTIVITIES	Attended International Computer Vision Summer School (ICVSS) 2022	
	Reviewer for T-PAMI, T-RO, RA-L, ICRA, IV	
TEACHING ASSISTANT	Machine Learning for Robotics	2020 - 2023
	3D Robot Vision	2020
	Intelligent Vehicles	2019
MSC THESIS SUPERVISION	Cross-View Camera Pose Estimation By Matching Local Features in 3D	
	<i>Sviatoslav Voloshyn</i>	Oct. 2022 - Aug. 2023
	Improving Cross-View Matching with Self-Supervised Learning	
	<i>Jianfeng Cui</i>	Jan. 2022 - Jan. 2023
	SliceNet: Street-to-Satellite Image Metric Localization using Local Feature Matching	
	<i>Ted de Vries Lentsch</i>	Nov. 2021 - Oct. 2022
LANGUAGE	English: Professional proficiency	
	German: Elementary proficiency	
	Chinese: Native	
HOBBIES	In my free time, I enjoy reading and doing sports. I am passionate about playing basketball and swimming. During my high school years in China, I was a national second-grade swimmer.	