Francis Engelmann Curriculum Vitae

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Current Appointments

· **ETH Zurich**, Switzerland.   10/2021 - present
  Postdoctoral Research Fellow (Prof. Dr. Marc Pollefeys)

· **Google**, Zurich, Switzerland.   10/2022 - present
  Visiting Researcher (PD Dr. Federico Tombari)

Education

· **Ph.D. Computer Vision**, RWTH Aachen University, Germany   06/2014 - 08/2021
  Thesis topic: *"3D Scene Understanding on Point Clouds" (Examination 16.08.2021)*
  Committee: Prof. Dr. Bastian Leibe, Prof. Dr. Siyu Tang, Prof. Dr. Leif Kobbelt

· **M.Sc. Computer Science**, RWTH Aachen University, Germany   10/2011 - 01/2014
  Minor: Electrical Engineering
  Thesis topic: *"Multiple Target Tracking for Marker-less Augmented Reality"*
  Committee: Prof. Dr. Bastian Leibe, Prof. Dr. Leif Kobbelt

· **B.Sc. Computer Science**, RWTH Aachen University, Germany   10/2008 - 10/2011
  Minor: Electrical Engineering
  Thesis topic: *"FabScan: Affordable 3D Laser Scanning of Physical Objects"*
  Committee: Prof. Dr. Jan Borchers, Prof. Dr. Stefan Kowalewski

Research and Industry Experience

· **Google Research**, PhD Research Intern, Zurich, Switzerland   06/2020 - 12/2020
  Topic: Realistic Multi-object 3D Reconstruction from a Single Image   (published at CVPR 2021)
  Mentors: Konstantinos Rematas, Vittorio Ferrari

· **Google X** (now Intrinsic), PhD Research Intern, Munich, Germany   06/2019 - 11/2019
  Topic: Instance Semantic Segmentation and Object Detection in 3D Scenes   (published at CVPR 2020)
  Mentors: Martin Bokeloh, Alireza Fathi, Matthias Nießner

· **Apple Inc.** 3D Vision Intern, Sunnyvale, CA, USA   04/2018 - 08/2018
  Research and development of deep learning techniques for large-scale point cloud processing

Academic Activities

· 3DV 2024: Website Chair 3dvconf.github.io/2024
· AAAI 2024, 2023: Senior Program Committee
· WACV 2023: Area Chair
· CSG 2023: Mentor at the Computer Science for Girls Workshop
· ICCV 2023: Workshop organizer OpenSun3D on Open-Vocabulary 3D Scene Understanding.
· ECCV 2022: Workshop co-organizer Human Body, Hands, and Activities from Egocentric Cameras
· ECCV 2022: Demo co-organizer Interactive Object Segmentation in 3D Point Clouds
· ELLIS 2021: Evaluator in the pre-screening process for the ELLIS PhD Program
· NeuRIPS 2021: Local Meetup co-organizer at ETH AI Center (30 posters, ∼120 guests)
· 3DV 2021: Demo organizer Mix3D: Out-Of-Context Data Augmentation
· Conference Reviewer: CVPR (2023, 2022, 2021, 2018), ECCV (2022, 2020), ICCV (2021, 2023), NeurIPS (2023, 2022, 2021, 2020), ICLR (2022), 3DV (2024, 2022), ICRA (2018, 2020), IROS (2017)
· Journal Reviewer: TPAMI (2021), IJCV (2020), ISPRS (2020), IEEE T-RO (2020), IEEE RA-L (2018, 2020, 2023)

Invited Talks

· Invited keynote speaker at the ICCV'23 CVAAD Workshop   Host: Prof. Khademi Seyran, 2023
· Invited speaker at the ETH AI Center   Host: Dr. Alexander Ilic, 2023
· Invited speaker and panelist at CVPR'22 ScanNet Workshop   Host: Prof. Angela Dai, 2022

· Invited talk at Google Zurich · Host: Dr. Simon Lynen, 2022
· Invited speaker at ETH PhD Seminar, Zurich · · · · · · · · · · · · · · · Host: Dr. Daniel Barath, 2022
· Invited talk at Google AR, Zurich · Host: Dr. Federico Tombari, 2022
· Invited speaker at ETH AI Center PostDoc Symposium · · · · · · · · · · · Host: Dr. Alexander Ilic, 2021
· Invited speaker at Stanford Geometric Computation Group · · · · · · Host: Prof. Leonidas Guibas, 2021
· Invited speaker at Max-Panck-Institute, University of Tübingen · · Host: Prof. Gerard Pons-Moll, 2021
· Invited talk at CVPR'20 ScanNet Workshop · · · · · Host: Prof. Angela Dai, Prof. Manolis Savva, 2020

AWARDS AND DISTINCTIONS

· ETH Zurich Career Seed Award, 2022 (30k CHF)
· ETH AI Center Postdoctoral Research Fellowship, 2021 (∼180k CHF)
· Outstanding Reviewer Awards: CVPR 2021, ECCV 2022
· Winner of CVPR 2022 ScanNet Benchmark Challenge on 3D semantic segmentation (1st place)
· Winner of CVPR 2022 Scan-to-BIM challenge (2nd place)
· Winner of CVPR 2020 ScanNet Benchmark Challenge on 3D instance segmentation (3rd place)
· Member of ELLIS society
· Selected for CVPR 2020 Doctoral Consortium (Mentor: Dr. Or Litany)
· Invited to Google Computer Vision Summit 2018, Zurich
· Accepted to International Computer Vision Summer School (ICVSS) 2015 (35% acceptance rate)

TEACHING EXPERIENCE

· Lecturer:	Machine Perception (Variational Autoencoder, Diffusion Models)	ETH Spring 2023
· Lecturer:	Projects in Machine Learning Research (3D Scene Understanding)	ETH Spring 2023
· Lecturer:	Machine Perception (Generative Models)	ETH Spring 2022
· Lecturer:	Projects in Machine Learning Research (3D Scene Understanding)	ETH Spring 2022
· Instructor:	Virtual Humans	ETH Spring 2022
· Teaching Assistant:	Computer Vision (Visual Odometry, SLAM, 3D Reconstruction)	RWTH Win. 2018
· Teaching Assistant:	Machine Learning (PDE, SVM, Random Forests, CNN, RNN)	RWTH Win. 2017
· Teaching Assistant:	Computer Vision	RWTH Sum. 2016
· Seminar Adviser:	Current Topics in Computer Vision and Machine Learning	RWTH Sum. 2015,16
· Teaching Assistant:	Introduction to Computer Science	RWTH Win. 2014,16

MENTORSHIP

Status	Student	Publications	Affiliation	Year	After Graduation
PhD	Ayça Takmez	ICCV'23, arXiv'23	ETH	2022-	
	René Zurbrügg		ETH	2023-	
	Baris Can Cam		TU Darmstadt	2022-	
	Silvan Weder		ETH	2022-	
	Julian Chibane	ECCV'22	MPI	2021-22	
Master	Vogel Mathias		ETH	2023-	
	Oliver Lemke		ETH	2023-	
	Alex Delitzas		ETH	2023-	
	Elisabetta Fedele	arXiv'23	ETH	2023	EPFL, Visit
	Robert Hönig		ETH	2022-	
	Filipe Paes		ETH	2022-	
	Yunfan Zou		ETH	2022-	
	Cafer Akcay	ICCV'23	ETH	2022	
	Irem Kaftan	ICCV'23	ETH	2022	
	Yuanwen Yue	CVPR'23	ETH	2022-23	MPI, PhD
	Anne Marx	ECCV'22 (Demo)	ETH	2022	
	Ekin Çelikkan	CVPR'22 (Challenge)	RWTH	2020-21	HEIBRiDS, PhD
	Alexey Nekrasov	3DV'21 (Oral)	RWTH	2020-21	RWTH, PhD
	Jonas Schult	CVPR'20 (Oral)	RWTH	2017-19	RWTH, PhD
	Cathrin Elich	GCPR'19	RWTH	2018-19	MPI, PhD
	Kushal Sharma		RWTH	2018-19	Amazon
	Anton Kasyanov	IROS'17	RWTH	2017-18	DataRobot
	Oleg Chernikov		RWTH	2016-17	Hunday Mobis
Bachelor	Leonard Schramm		RWTH	2020-21	RWTH, M.Sc.
	Marvin Pförtner		RWTH	2017-18	UoTübingen, M.Sc.