

Curriculum Vitae

Personal Information

Name	Hinz, Tobias
E-Mail	tob.hinz@gmail.com
Personal Website	https://www.tobiashinz.com
LinkedIn	https://www.linkedin.com/in/tobias-hinz-397881123
Google Scholar	https://scholar.google.de/citations?user=SugTw28AAAAJ
Github	https://github.com/tohinz/

Education

April 2017 – April 2021 Doctor of Philosophy	PhD, Knowledge Technology University of Hamburg, Germany Thesis: <i>Disentanglement, Compositionality, Specification: Representation Learning with Generative Adversarial Networks</i>
October 2014 – November 2016 Master of Science	M.Sc. Intelligent Adaptive Systems (IAS) University of Hamburg, Germany Final Grade: 1.09 (best IAS degree of 2016)
September 2011 – July 2014 Bachelor of Science	B.Sc. Business Information Systems University of Mannheim, Germany Final Grade: 1.6 (among best 10%)
August 2013 – January 2013	Semester abroad (student exchange) National University of Singapore
2001 – 2010 High-School	General Qualification for University Entrance Schubart Gymnasium Ulm, Germany

Experience

June 2023 – Present	Technical Lead (Adobe Firefly) at the GenAI and Sensei Team Overseeing the development of core foundational models for Adobe Firefly
January 2021 – May 2023	Machine Learning Research Engineer at Adobe Research Working on generative models within the Computational Artistry Team
January 2019 – December 2020	Research Associate with the Crossmodal Learning Project Subprojects A5 and C4: crossmodal learning with visual and textual data
June 2020 – September 2020	Research Intern at Adobe Research Working on generative models within the Creative Intelligence Lab
July 2019 – August 2019	Deep Learning and Reinforcement Learning Summer School Two weeks summer school about DL and RL, organized by CIFAR
July 2019	Eastern European Machine Learning Summer School One week summer school about DL and RL, organized by DeepMind
January 2016 – March 2017	Research Assistant with the University of Hamburg Neural Models for NLP, Knowledge Technology Group
November 2014 – March 2017	Employee at Sprinkenhof GmbH, Hamburg Support and administration of all IT equipment
July – September 2014	Work and Travel, Melbourne, Australia
February 2012 – June 2014	Student Assistant with the University of Mannheim Teaching Assistant at the Chair of Software Engineering System Administrator at the Business Computer Pool

Awards and Scholarships

2023	Adobe Tech Excellence Award (Outstanding Technical Talent) For starting the Firefly initiative and writing >80% of the initial code base
2022	WACV Best Paper Award
2021	Outstanding reviewer: ICLR, CVPR
May 2019	ICLR Travel Award, New Orleans, USA
April 2017 – December 2018	Doctoral Scholarship, University of Hamburg
July 2018	IEEE CIS Travel Award for the WCCI, Rio de Janeiro, Brazil
January 2017	Award: Best IAS Degree of 2016
August 2013 – January 2014	DAAD Scholarship for Semester Abroad

Selected Publications

SIGGRAPH 2023	Cusuh Ham, James Hays, Jingwan Lu, Krishna Kumar Singh, Zhifei Zhang, Tobias Hinz: "Modulating Pretrained Diffusion Models for Multimodal Image Synthesis", SIGGRAPH Conference Proceedings, 2023
CVPR 2023	Shaoan Xie, Zhifei Zhang, Zhe Lin, Tobias Hinz, and Kun Zhang: "SmartBrush: Text and Shape Guided Object Inpainting with Diffusion Model", IEEE Conference on Computer Vision and Pattern Recognition, 2023
ACM ToG 2022	Difan Liu, Sandesh Shetty, Tobias Hinz, Matthew Fisher, Richard Zhang, Taesung Park, and Evangelos Kalogerakis: "ASSET: Autoregressive Semantic Scene Editing with Transformers at High Resolutions", ACM Transactions on Graphics (SIGGRAPH), 2022
WACV 2021	Tobias Hinz, Matthew Fisher, Oliver Wang, and Stefan Wermter: "Improved Techniques for Training Single Image GANs", IEEE Winter Conference on Applications of Computer Vision, 2021
TPAMI 2020	Tobias Hinz, Stefan Heinrich, and Stefan Wermter: "Semantic Object Accuracy for Generative Text-to-Image Synthesis", IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020
ICLR 2019	Tobias Hinz, Stefan Heinrich, and Stefan Wermter: "Generating Multiple Objects at Spatially Distinct Locations", International Conference on Learning Representations, 2019

Reviewing Service

Journals	IEEE TPAMI, IJCV, IEEE TIP, IEEE Trans. SMC: Systems IEEE Trans. Aff. Comp., IEEE Access Neurocomputing
Conferences	ICLR, CVPR, NeurIPS, ICCV, IROS, WACV ICML, SIGGRAPH Asia

Languages

German (native)
English (fluent)