Curriculum Vitae

Personal Information

Name E-Mail Personal Website LinkedIn Google Scholar Github

Hinz, Tobias
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https://www.tobiashinz.com
https://www.linkedin.com/in/tobias-hinz-397881123
https://scholar.google.de/citations?user=SugTw28AAAAJ

Education

April 2017 – April 2021 Doctor of Philosophy

October 2014 – November 2016 Master of Science

> September 2011 – July 2014 Bachelor of Science

> August 2013 – January 2013

2001 – 2010 High-School PhD, Knowledge Technology

https://github.com/tohinz/

University of Hamburg, Germany

Thesis: Disentanglement, Compositionality, Specification: Representation Learning with Generative Adversarial Networks

M.Sc. Intelligent Adaptive Systems (IAS)

University of Hamburg, Germany

Final Grade: 1.09 (best IAS degree of 2016)

B.Sc. Business Information Systems University of Mannheim, Germany Final Grade: 1.6 (among best 10%)

Semester abroad (student exchange) National University of Singapore

General Qualification for University Entrance Schubart Gymnasium Ulm, Germany

Experience

June 2025 - Present

June 2023 - June 2025

January 2021 - May 2023

January 2019 – December 2020

June 2020 – September 2020

July 2019 – August 2019

July 2019

January 2016 - March 2017

February 2012 – June 2014

Research Scientist at Meta Superintelligence Labs Working on multimodal model capabilities for media generation

Technical Lead (Adobe Firefly) at the GenAl and Sensei Team Overseeing the development of core foundational models for Adobe Firefly

Machine Learning Research Engineer at Adobe Research Working on generative models within the Computational Artistry Team

Research Associate with the Crossmodal Learning Project Subprojects A5 and C4: crossmodal learning with visual and textual data

Research Intern at Adobe Research
Working on generative models within the Creative Intelligence Lab

Deep Learning and Reinforcement Learning Summer School Two weeks summer school about DL and RL, organized by CIFAR

Eastern European Machine Learning Summer School
One week summer school about DL and RL, organized by DeepMind

Research Assistant with the University of Hamburg
Neural Models for NLP, Knowledge Technology Group

Student Assistant with the University of Mannheim Teaching Assistant at the Chair of Software Engineering

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

Doctoral Scholarship, University of Hamburg

April 2017 – December 2018 July 2018 IEEE CIS Travel Award for the WCCI, Rio de Janeiro, Brazil

> January 2017 Award: Best IAS Degree of 2016

DAAD Scholarship for Semester Abroad August 2013 - January 2014

Selected Publications

James M. Rehg, Tobias Hinz, ShotAdapter: Text-to-Multi-Shot Video Generation with Diffusion Models, IEEE Conference on **CVPR 2025** Computer Vision and Pattern Recognition, 2025

Cusuh Ham, Matthew Fisher, James Hays, Nicholas Kolkin, Yuchen Liu, Richard Zhang, Tobias Hinz: "Personalized Residuals for Concept-Driven Text-to-Image Generation", IEEE

Ozgur Kara, Krishna Kumar Singh, Feng Liu, Duygu Ceylan,

Conference on Computer Vision and Pattern Recognition, 2024 **CVPR 2024**

> 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 **CVPR 2023**

> 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

ACM ToG 2022 Graphics (SIGGRAPH), 2022

> 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

WACV 2021 Tobias Hinz, Stefan Heinrich, and Stefan Wermter:

"Semantic Object Accuracy for Generative Text-to-Image Synthesis", IEEE Transactions on Pattern Analysis and Machine

TPAMI 2020 Intelligence, 2020

Tobias Hinz, Stefan Heinrich, and Stefan Wermter:

"Generating Multiple Objects at Spatially Distinct Locations", International Conference on Learning Representations, 2019

Reviewing Service

ICLR 2019

IEEE TPAMI, IJCV, IEEE TIP, IEEE Trans. SMC: Systems Journals IEEE Trans. Aff. Comp., IEEE Access

Conferences ICLR, CVPR, NeurIPS, ICCV, IROS, WACV

ICML, SIGGRAPH Asia