Felix Taubner – Résumé
PhD student working on the intersection of 3D computer vision and generative AI, with a focus on digital humans.

felixtaubner.github.io | felix.taubner@gmail.com | +1 (416) 826-7949 | linkedin.com/in/ftaubner

Education

PhD in Computer Science, *University of Toronto*. **09/2024 — present**
Supervised by David B. Lindell. Specializing in 4D generative models with a focus on digital human avatars. Toronto, Canada

MSc in Robotics, Systems and Control, *ETH Zurich*. GPA: 5.96/6.00 **09/2019 — 08/2022**
Supervised by Roland Siegwart. Focus: 3D computer vision, perception, and artificial intelligence Zurich, Switzerland

BSc in Mechanical Engineering, *ETH Zurich*. GPA: 5.72/6.00 **09/2015 — 05/2019**
Focus: Robotics, control and computational methods Zurich, Switzerland

Research Experience

Research Intern @ Meta **05/2025 — 03/2026**
Supervised by Michael Zollhoefer. Topic: Geometry-free generative models for 4D human body animation. Pittsburgh, USA

PhD Student @ University of Toronto **05/2024 — present**
Supervised by David B. Lindell. Toronto, Canada

- Generating controllable 4D human avatars from reference images using morphable multi-view diffusion models and deformable 3D Gaussian splatting. SOTA performance on 4D head avatar reconstruction from single images. Published in CVPR 2025 as oral presentation and SIGGRAPH Asia 2025.

AI Research Scientist @ LG Electronics **10/2022 — 02/2024**
Supervised by Jinmiao Huang and Kevin Ferreira. Toronto, Canada

- Developed a vision-transformer-based 3D face tracking pipeline that achieves 54% better motion capture performance and 8% better 3D reconstruction accuracy over SOTA. Published in CVPR 2024.
- Led a team of 4 researchers (after October 2023), responsible for aligning and planning research directions with HQ across various projects in generative AI for digital human animation.

Visiting Graduate Student and Research Assistant @ University of Toronto **11/2021 — 09/2022**
Supervised by Igor Gilitschenski. Toronto, Canada

- Master Thesis: developed a novel representation for event-based data for downstream deep learning tasks. Improved classification accuracy on the *N-Caltech101* dataset by 2.3% over SOTA.

Graduate Student Research @ ETH Zurich **01/2020 — 08/2020**
Supervised by Roland Siegwart. Zurich, Switzerland

- Semester Thesis: Created a place recognition pipeline that uses attention-based neural networks to cluster and describe 3D line segments obtained from RGB-D cameras. Published in 3DV 2020.

Publications

- **Felix Taubner**, Ruihang Zhang, Sherwin Bahmani, Mathieu Tuli and David B. Lindell: **"MVP4D: Multi-View Portrait Video Diffusion for Animatable 4D Avatars"**, *SIGGRAPH Asia 2025 (Conference)* **12/2025**
- SaiKiran Tedla, Kelly Zhu, Trevor Canham, **Felix Taubner**, Michael S. Brown, Kiriakos N. Kutulakos, David B. Lindell: **"Generating the Past, Present and Future from a Motion-Blurred Image"**, *SIGGRAPH Asia 2025* ***(Journal)*** **12/2025**
- **Felix Taubner**, Ruihang Zhang, Mathieu Tuli and David B. Lindell: **"CAP4D: Creating Animatable 4D Portrait Avatars with Morphable Multi-View Diffusion Models"**, *CVPR 2025* ***(Oral: top 3.3% of accepted papers)*** **06/2025**
- **Felix Taubner**, Prashant Raina, Mathieu Tuli, Eu Wern Teh, Chul Lee and Jinmiao Huang: **"3D Face Tracking from 2D Video through Iterative Dense UV to Image Flow"**, *CVPR 2024* **06/2024**
- **Felix Taubner**, Florian Tschopp, Tonci Novkovic, Roland Siegwart and Fadri Furrer: **"LCD – Line Clustering and Description for Place Recognition"**, *3DV 2020* **11/2020**

Awards

- **Canada Graduate Research Scholarship — Doctoral** (NSERC CGRS-D, 40'000 CAD / year) **05/2026 — 04/2029**
- **Robert E. Lansdale / Okino Computer Graphics Graduate Fellowship** (2'000 CAD) for academic merit. **03/2026**
- **Ontario Graduate Scholarship** (10'000 CAD) for academic merit. **05/2025 — 04/2026**
- **DiDi Graduate Student Award in Computer Science** (10'000 CAD) for academic merit. **01/2025**
- **Master Thesis Grant** from the Zeno Karl Schindler Foundation (12'000 CHF) for academic merit. **03/2022**
- **Outstanding D-MAVT Bachelor Award** for excellent grades in first year exams (2'000 CHF). **09/2016**