Felix Draxler

Postdoctoral Scholar
March 13, 2026

fdraxler@uci.edu | fdraxler.github.io | Google Scholar | LinkedIn

Education

PhD in Computer Science & Maths Heidelberg University, Germany. 08/2019-10/2024

- Developed free-form flows: Flexible generative model with single-step sampling.
- Proved that well-conditioned coupling-based normalizing flows are universal and efficient.
- Supervisors: Ullrich Köthe and Christoph Schnörr.
- Grade: summa cum laude (with the highest distinction, top 15%)

M.Sc. Physics Heidelberg University, Germany. 10/2015-09/2018

- Specialization in Computational Physics.
- Discovered that minima of deep neural networks are connected by low-loss paths.
- Thesis supervisors: Fred Hamprecht and Manfred Salmhofer.
- Grade: 1.1 (very good)

B.Sc. Physics LMU Munich, Germany. 10/2011-03/2015

- Semester abroad: Grenoble INP, France.
- Grade: 1.54 (good)

Work Experience

Postdoctoral scholar University of California, Irvine. 12/2024-present

- Developed parallel token prediction (LLMs that predict joint sequences of tokens), and flexible time series models.
- Advised five graduate and four undergraduate students towards three accepted, two submitted, and three ongoing projects.
- Acting group leader for five months, managing collaborations and research group.
- Conceptualized and contributed to writing for NSF grant applications.
- Coordinated cooperation with Chan-Zuckerberg Initiative for generative models in cellular biology.
- Advisors: Stephan Mandt and Padhraic Smyth.

Internship at SAP Walldorf, Germany. 01/2016-12/2016

- Sped up performance measurement tool by 10x for high-priority customer support team.

Founder of *die archemisten* Munich, Germany. 04/2010-10/2024

- Bootstrapped self-owned business: Slack-style collaboration platform with 600+ users.

Voluntary Work (selection) 2009-present

- Lead team of 30 to TED-style conference with 1k participants, 50 speakers and $70k budget.
- Successfully applied for support grants totaling $25k and acquired conference speakers.
- Co-chair of UCI Postdoctoral Association: Overlook team of 10 and budget of $17k.

Awards

- Ruprecht-Karls-Preis: Best 2024 PhD thesis at Heidelberg University (top 6 of 1135) 2025
- ICLR 2024 Outstanding Reviewer (top 1.3%) 2024
- GCPR Best Paper Honorable Mention (top 3) 2020
- Scholarship "Max Weber-Programm" for academic excellence 2011–2018
- DPG-Abiturpreis for outstanding performance in physics (best in class) 2011

Publications

See also ↗ Google Scholar. Representative publications are [highlighted].

Preprints & Under Submission

[1] Daniel Geyfman*, **Felix Draxler***, Jan Groeneveld, Hyunsoo Lee, Theofanis Karaletsos, and Stephan Mandt. "Calibrated Test-Time Guidance for Bayesian Inference". In: *arXiv preprint arXiv:2602.22428* (2026).

[2] Lukas Laskowski, **Felix Draxler**, Michael Hladik, Fabian Panse, Jan Portisch, Padhraic Smyth, and Felix Naumann. "Hamilton: Learning Ontologies from Relational Databases". In: *Under submission* (2026).

Peer-reviewed

[1] Coen Adler, Yuxin Chang, **Felix Draxler**, Samar Abdi, and Padhraic Smyth. "Beyond Accuracy: Are Time Series Foundation Models Well-Calibrated?" In: *International Conference on Learning Representations*. 2026.

[2] **Felix Draxler***, Justus Will*, Farrin Marouf Sofian, Theofanis Karaletsos, Sameer Singh, and Stephan Mandt. "Parallel Token Prediction for Language Models". In: *International Conference on Learning Representations*. 2026.

[3] **Felix Draxler**, Yang Meng, Kai Nelson, Lukas Laskowski, Yibo Yang, Theofanis Karaletsos, and Stephan Mandt. "Transformers for Mixed-type Event Sequences". In: *Advances in Neural Information Processing Systems*. **Spotlight**. 2025.

[4] Kushagra Pandey, Farrin Marouf Sofian, **Felix Draxler**, Theofanis Karaletsos, and Stephan Mandt. "Variational Control for Guidance in Diffusion Models". In: *International Conference on Machine Learning*. 2025.

[5] Stefan Wahl, Armand Rousselot, **Felix Draxler**, and Ullrich Köthe. "TRADE: Transfer of Distributions between External Conditions with Normalizing Flows". In: *International Conference on Artificial Intelligence and Statistics*. 2025.

[6] **Felix Draxler**, Stefan Wahl, Christoph Schnörr, and Ullrich Köthe. "On the Universality of Volume-Preserving and Coupling-Based Normalizing Flows". In: *International Conference on Machine Learning*. 2024.

[7] **Felix Draxler***, Peter Sorrenson*, Lea Zimmermann, Armand Rousselot, and Ullrich Köthe. "Free-form Flows: Make Any Architecture a Normalizing Flow". In: *International Conference on Artificial Intelligence and Statistics*. 2024.

[8] Maurus Hans, Elinor Kath, Marius Sparn, Nikolas Liebster, Helmut Strobel, Markus K. Oberthaler, **Felix Draxler**, and Christoph Schnörr. "Bose-Einstein condensate experiment as a nonlinear block of a machine learning pipeline". In: *Phys. Rev. Res.* 6 (1 Jan. 2024), p. 013122.

[9] Peter Sorrenson*, **Felix Draxler***, Armand Rousselot, Sander Hummerich, Lea Zimmermann, and Ullrich Köthe. "Lifting Architectural Constraints of Injective Flows". In: *International Conference on Learning Representations*. 2024.

[10] Peter Sorrenson*, **Felix Draxler***, Armand Rousselot*, Sander Hummerich, and Ullrich Köthe. "Learning Distributions on Manifolds with Free-Form Flows". In: *Advances in Neural Information Processing Systems*. 2024.

[11] **Felix Draxler**, Lars Kühmichel, Armand Rousselot, Jens Müller, Christoph Schnörr, and Ullrich Köthe. "On the Convergence Rate of Gaussianization with Random Rotations". In: *International Conference on Machine Learning*. 2023.

[12] Jens Müller, Stefan T. Radev, Robert Schmier, **Felix Draxler**, Carsten Rother, and Ullrich Köthe. "Finding Competence Regions in Domain Generalization". In: *Transactions on Machine Learning Research* (2023). ISSN: 2835-8856.

[13] **Felix Draxler**, Christoph Schnörr, and Ullrich Köthe. "Whitening Convergence Rate of Coupling-based Normalizing Flows". In: *Advances in Neural Information Processing Systems*. **Oral**. 2022.

[14] **Felix Draxler**, Jonathan Schwarz, Christoph Schnörr, and Ullrich Köthe. "Characterizing the Role of a Single Coupling Layer in Affine Normalizing Flows". In: *German Conference on Pattern Recognition*. **Best Paper Honorable Mention**. 2020.

[15] Jonathan Schwarz, **Felix Draxler**, Ullrich Köthe, and Christoph Schnörr. "Riemannian SOS-Polynomial Normalizing Flows". In: *German Conference on Pattern Recognition*. 2020.

[16] Nasim Rahaman, Aristide Baratin, Devansh Arpit, **Felix Draxler**, Min Lin, Fred Hamprecht, Yoshua Bengio, and Aaron Courville. "On the Spectral Bias of Neural Networks". In: *International Conference on Machine Learning*. 2019.

[17] **Felix Draxler**, Kambis Veschgini, Manfred Salmhofer, and Fred Hamprecht. "Essentially No Barriers in Neural Network Energy Landscape". In: *International Conference on Machine Learning*. **Long Oral**. 2018.

Community Service

- Conference Area Chair: NeurIPS 2025, ICLR 2026, ICML 2026.
- Conference Reviewer: ICLR 2021, 2024; ICML 2025; NeurIPS 2020, 2024; AISTATS 2024.
- Journal Reviewer: JMRL 2023, 2024; IJCV 2024, 2025.

Teaching Experience

- Guest lecturer for Stephan Mandt — University of California, Irvine
  Deep Generative Models (Fall 2025), Machine Learning and Data Mining (Winter 2026).
- Head teaching assistant for Ullrich Köthe — Heidelberg University, Germany
  Fundamentals of Machine Learning (Winter 2020/2021), Advanced ML (Summer 2021)
  - Supervised group of seven TAs, prepared exercise sheets, and overlooked correction.
  - Implemented cross-feedback system involving peer-review by students.
- Teaching assistant for Ullrich Köthe — Heidelberg University, Germany
  Fundamentals of Machine Learning (Winter 2021/2022)
- Workshop teacher — CdE Summer School, Germany
  A 30-hour introduction to Python (Summer 2019).

Invited Talks

- Cerebras (Seminar Series) — 2026
- University of Massachusetts, Boston (Department of Computer Science) — 2026

- Chan Zuckerberg Initiative (AI Research Monthly Meeting) 2025
- Mila - Quebec AI Institute (Generative/Sampling Reading Group) 2025
- UCI, Center for Machine Learning and Intelligent Systems 2025
- Fraunhofer Institute for Industrial Mathematics ITWM 2023
- Tutorial Speaker at GCPR 2023 2023
- NYU, Courant Institute of Mathematical Sciences (Andrew Gordon Wilson) 2022
- Oral presentation at NeurIPS 2022 2022
- York University, Department of Electrical Engineering and Computer Science 2022
- Stanford, Department of Computer Science (Stefano Ermon) 2022
- Yale University (Smita Krishnaswamy) 2022
- Oral presentation at GCPR 2020 2020
- UCLA/MPI MiS, Math Machine Learning Seminar 2020
- Aspen Winter School on Theoretical Physics for Machine Learning 2019
- Oral presentation at ICML 2018 2018

Third-party Funding

I have contributed significantly an NSF grant of Prof. Ari Pakman (Ben-Gurion University of the Negev, Israel), Prof. Maja Waldron (University of Wisconsin–Madison), and Prof. Stephand Mandt (University of California, Irvine) about 1M USD, currently under review.

I have also successfully applied for third-party funds for the Heidelberger Symposium, amounting to a total of 39k Euro through Klaus-Tschira Stiftung gGmbH (2023, 2024, 2025), Karin und Carl-Heinrich Esser Stiftung (2023, 2024), and Heidehofstiftung (2023).

References

Stephan Mandt: `mandt@uci.edu`
Associate Professor. University of California, Irvine
Postdoc advisor

Padhraic Smyth: `smyth@ics.uci.edu`
Distinguished Professor. University of California, Irvine
Postdoc advisor

Ullrich Köthe: `ullrich.koethe@iwr.uni-heidelberg.de`
Adjunct Professor. Heidelberg University, Germany
PhD advisor

Christoph Schnörr: `schnoerr@math.uni-heidelberg.de`
Professor. Heidelberg University, Germany
PhD advisor

Languages

German (native speaker), English (C1), French (B2), Spanish (A2).