Benno Krojer

benno.krojer@gmail.com | bennokrojer.com | Bluesky | GitHub

EDUCATION

MILA – Quebec Artificial Intelligence Institute / McGill University   2021 – 2026
PhD in Computer Science   *Montreal, Canada*

Courses: Applied Machine Learning, Mathematical Tools for Computer Science, Representation Learning (UdeM), Reinforcement Learning (all with grade A)

LMU Munich   2017 – 2020
Bachelor of Science in Computational Linguistics, Minor in Computer Science   *Munich, Germany*
- Grade: 1.1 (equivalent to GPA of 3.9), top of class
- Thesis: Are Pretrained Language Models Symbolic Reasoners Over Knowledge? (supervised by Hinrich Schütze)

Trinity College   Sept 2018 – Apr 2019
Erasmus Exchange for 2 semesters   *Dublin, Ireland*

INDUSTRY AND RESEARCH EXPERIENCE

Research Intern in JEPA team (full-time)   July 2024 – Feb 2025
Meta (FAIR)   *Montreal, Canada*

- Analyzing physical world understanding in VideoLLMs (supervision: Mido Assran and Nicolas Ballas)

Research Intern (full-time)   Apr 2021 – Aug 2021
MILA - Quebec Artificial Intelligence Institute   *Montreal, Canada*

- Vision-and-Language Research

Research Intern in Machine Translation (full-time)   Dec 2020 – Mar 2021
Lilt GmbH   *Berlin, Germany*

- Research on novel attention mechanisms in Transformers to improve coverage in Neural Machine Translation

Machine Learning Intern in Computer Vision for Robots (full-time)   Sept 2020 – Nov 2020
Micropsi Industries   *Berlin, Germany*

- Making the computer vision model deployed on robots more robust against difficult light conditions

Research Assistant in Machine Translation (20h/week)   Feb 2020 – Aug 2020
LMU Munich   *Munich, Germany*

- Researched adversarial attacks, data augmentation and test set creation for Coreference Resolution in Neural Machine Translation together with Prof. Alexander Fraser and his PhD students (publication listed below)
- Responsible for code repository and 2-3 sections of the resulting paper

Deep Learning Engineer (20h/week)   May 2019 – Mar 2020
Helsing (named Hellsicht GmbH at the time)   *Munich, Germany*

- Cell image segmentation pipeline with U-Net & ResNet models for client from the pharmaceutical industry
- Predictive Maintenance in mechanical systems
- Developing a demo for a workshop on automatic visual inspection of surfaces
- Clustering of point clouds into relevant buildings or landscape objects

Computational Linguistics Progammer (10h/week)   Feb 2017 – Jul 2018
Intrafind GmbH   *Munich, Germany*

- Improving language identification system used in Intrafind's Search Engine
- Identifying bugs in complex source code and analyzing corpora

Publications

- [Learning Action and Reasoning-Centric Image Editing from Videos and Simulation](#)
  Benno Krojer, Dheeraj Vattikonda, Luis Lara, Varun Jampani, Eva Portelance, Christopher Pal, Siva Reddy.
  Conference on Neural Information Processing Systems (NeurIPS Spotlight, Dataset & Benchmarks Track), 2024. (Spotlight)

- [Are Diffusion Models Vision-And-Language Reasoners?](#)
  Benno Krojer, Elinor Poole-Dayan, Vikram Voleti, Christopher Pal, Siva Reddy.
  Conference on Neural Information Processing Systems (NeurIPS), 2023.

- [Image Retrieval from Contextual Descriptions](#)
  Benno Krojer, Vaibhav Adlakha, Vibhav Vineet, Yash Goyal, Edoardo Ponti, Siva Reddy.
  Association for Computational Linguistics (ACL), 2022.

- [Are Pretrained Language Models Symbolic Reasoners Over Knowledge?](#)
  Nora Kassner*, **Benno Krojer***, Hinrich Schütze.
  Conference on Computational Natural Language Learning (CoNLL), 2020.

- [ContraCAT: Contrastive Coreference Analytical Templates for Machine Translation](#)
  Dario Stojanovski*, **Benno Krojer***, Denis Peskov*, Alexander Fraser.
  Conference on Computational Linguistics (COLING), 2020.

- [Improving Automatic VQA Evaluation Using Large Language Models](#)
  Oscar Manas, **Benno Krojer**, Aishwarya Agrawal.
  AAAI Conference on Artificial Intelligence, 2023

- [Pragmatic Inference with a CLIP Listener for Contrastive Captioning](#)
  Jiefu Ou, **Benno Krojer**, Daniel Fried.
  Findings of the Association for Computational Linguistics (ACL) 2023

---

*equal contribution

Scholarships

- Vanier Scholarship (50.000 CAD/year, 2023 - 2026)

- Nick Cercone Scholarship (6.000 CAD, 2022)

- FRQNT Scholarship (declined, 2023)

Academic/Community Service and Talks

- **Organizer** of the Mila-wide speaker series [Tea Talks](#) (Jan 2025 – ongoing)

- **Reviewing**: Actionable Interpretability Workshop at ICML 2025, MIV (Mechanistic Interpretability for Vision) Workshop at CVPR 2025, CogSci 2025, CVPR 2025, NeurIPS 2024, NeurIPS DB Track 2024, COLM (Ethics Reviewer) 2024, ACL 2024, COLING 2024, [Multilingual Multimodal Learning (MML) Workshop at ACL 2022](#)

- **Talks**: Speed Science competition at Mila ([Recording](#)) (June 2025), FAIR Reading Group (September 2024), AI2 Mosaic (February 2024), ACL Oral Presentation (May 2022), Samsung/Mila/NYU Workshop (April 2022), Copenhagen NLP Reading Group (April 2022)

- Workshop Organization: NewInML at NeurIPS 2023 (lead organizer of speaker selection)

- **Supervision/Mentoring**: Ada Tur (undergraduate intern, 2025), Nooshin Soheililangroodi (undergraduate independent study in CS, McGill, 2024), Michelle Yang (undergraduate independent study in Linguistics, McGill, 2021)

- **Teaching**: TA for COMP 451 (Fundamentals of Machine Learning), Guest Lectures at Natural Language Understanding with Deep Learning course

- **Reading Group** organization (at Mila): founded the Language Grounding Reading Group (2021-2025)

- Volunteering for AI Helps Ukraine (Nov 2023)

- McGill BRIDGE Mentoring Program (Winter 2024): CS grad students are matched with underrepresented undergrads to help them get started in research

- Reviewer of applications for Mila PhD/MSc cohort (Dec 2023)

EXTRA-CURRICULAR

Founder of *PhilosophiaMunich*, a Student Philosophy Society Aug. 2019 – Jul. 2021
TUM/LMU Munich *Munich, Germany*

- Organization of regular paper discussions, speaker events, dedicated reading groups and socials

- Creating Social Media Content & recruiting new members

Competitive Ultimate Frisbee 2011 – Today

- Highlights: U24 Worlds and U17 Euros for German National Team, 8th best club in Europe 2018

- Coaching: currently Mixed senior team in Montreal, Munich Juniors Team for several years

- Supervised children at sports camp for two years during their school holidays, as full-time paid voluntary work

Member of Student's Committee (Fachschaft) Oct. 2017 – Jun. 2018
Organization of events such as Christmas or Summer party