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# **EDUCATION**

#### UNIVERSITY OF BERN

PhD in Computer Science

Jul. 2020 - Jan. 2024 | Switzerland summa cum laude (Grade average: 6/6) Advisors: Matthias Stürmer & Ilias Chalkidis

#### STANFORD UNIVERSITY

RESEARCH VISIT

Oct. 2022 - Mar. 2023 | Switzerland Advisors: Daniel E. Ho & Percy Liang Collaboration with the CRFM

# UNIVERSITIES OF BERN, NEUCHÂTEL, AND FRIBOURG

MSc in Computer Science

Sep. 2018 - Dec. 2019 | Switzerland Grade average: 5.50/6 | Thesis: 6/6 Exchange: NTU, Singapore

#### UNIVERSITY OF BERN

**BSC IN COMPUTER SCIENCE** 

Sep. 2013 - Aug. 2018 | Switzerland Grade average: 5.41/6 | Thesis: 6/6 Exchange: University of Exeter, England

# LINKS

Google Scholar LinkedIn:// joelniklaus Twitter:// @joelniklaus Github:// joelniklaus HuggingFace:// joelniklaus

# SKILLS & INTERESTS

## **LANGUAGES**

German • English • Spanish • French

#### **PROGRAMMING**

used regularly:
Python • Java • PHP • TypeScript
can get things done:
Kotlin • Sass • SQL • ETFX

#### **FRAMEWORKS**

transformers & datasets • PyTorch • JAX • PAX • T5X • SeqIO • SpaCy • Keras

## **TOOLS**

Docker • Git • PyCharm • AWS • GCP

#### **RESEARCH INTERESTS**

Legal NLP • Data Centric ML •
Benchmarking • Multilingual Language
Model Pretraining • Instruction Tuning

## **EXPERIENCE**

## **HARVEY** | RESEARCH SCIENTIST

Sep. 2024 - present | San Francisco, United States

I run large scale model evaluations on internal and external legal benchmarks.

## (GOOGLE) X | PHD RESIDENT

Jul. 2023 - Nov. 2023 | Mountain View, United States

I pretrained and instruction tuned multi-billion parameter multilingual LLMs in the Legal Domain on hundreds of TPU cores achieving state-of-the-art on LegalBench.

## THOMSON REUTERS LABS | DATA SCIENCE INTERN

Mar. 2022 - Aug. 2022 | Zug, Switzerland

I cheaply pretrained Longformers for the Legal Domain. Patent Application pending.

## **BERN UNIVERSITY OF APPLIED SCIENCES | LECTURER**

Aug. 2021 - present | Bern, Switzerland

I lecture about LLMs in three applied modules on AI.

I planned and conducted the technical part of the module Software Engineering.

# UNIVERSITY OF BERN | LECTURER AND TEACHING ASSISTANT

Sep. 2015 - Dec. 2024 | Bern, Switzerland

I co-teach about transformers (CAS), planned and led the "NLP Seminar" (BSc/MSc), and was a TA for "Programming Languages" (MSc), "Software Engineering" (BSc) and "Computer Networks" (BSc).

## **AWARDS**

2024	Winner	Outstanding Paper Award @ ACL for MultiLegalPile
2021	Research Grant	60'000 CHF from Swiss Federal Supreme Court
2019	Nominee	Best MSc Thesis, University of Fribourg, Department of

Computer Science

2017 Winner Excellent Work in Computer Science (BSc Thesis), Joint

Alumni Assoc., Universities Bern, Neuchâtel & Fribourg

# SELECTED PUBLICATIONS

**J. Niklaus** , J. Merane, L. Nenadic, S. Ahmadi, Y. Gao, C. A. H. Chevalley, C. Humbel, C. Gösken, L. Tanzi, T. Lüthi, S. Palombo, S. Poff, B. Yang, N. Wu, M. Guillod, R. Mamié, D. Brunner, J. Pereyra, N. Grupen

**SwiLTra-Bench**: The Swiss Legal Translation Benchmark

ACL Main 2025, Vienna, Austria

**J. Niklaus**, L. Zheng, AD. McCarthy, C. Hahn, BM. Rosen, P. Henderson, DE. Ho, G. Honke, P. Liang, C. Manning

**LawInstruct**: A Resource for Studying Language Model Adaptation to the Legal Domain

NAACL Findings 2025, Albuquerque, United States

**J. Niklaus** , V. Matoshi, M. Stürmer, I. Chalkidis, D. Ho **MultiLegalPile** : A 689GB Multilingual Legal Corpus

ACL Main 2024, Bangkok, Thailand

J. Niklaus, V. Matoshi, P. Rani, A. Galassi, M. Stürmer, I. Chalkidis

**LEXTREME**: A Multi-Lingual and Multi-Task Benchmark for the Legal Domain

EMNLP Findings 2023, Singapore, Singapore