Joel Niklaus

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EDUCATION

STANFORD UNIVERSITY
Research Visit
Oct. 2022 - Mar. 2023 | Switzerland
Advised by Daniel E. Ho and Percy Liang
Collaboration with CRFM

UNIVERSITY OF BERN
PhD in Computer Science
Jul. 2020 - Jan. 2024 | Switzerland
NRP 77 Project: Open Justice vs. Privacy

UNIVERSITIES OF BERN, NEUCHÂTEL, AND FRIBOURG
MSc in Computer Science
Sep. 2018 - Dec. 2019 | Switzerland
Grade average: 5.50/6 | Thesis: 6/6
Exchange at Nanyang Technological University, Singapore (Spring 2019)

UNIVERSITY OF BERN
BSc in Computer Science
Sep. 2013 - Aug. 2018 | Switzerland
Grade average: 5.41/6 | Thesis: 6/6
Exchange at 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 • LaTeX

FRAMEWORKS
huggingface • PyTorch • SpaCy • Keras

TOOLS
Docker • Git • PyCharm • AWS • GCP

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

EXPERIENCE

(GOOGLE) X | PhD Resident
Jul. 2023 - Nov. 2023 | Mountain View, United States
Pretraining and Instruction Tuning LLMs in the Legal Domain

THOMSON REUTERS LABS | Data Science Intern
Mar. 2022 - Aug. 2022 | Zug, Switzerland
I cheaply pretrained Longformers for the Legal Domain. Patent Application pending.

NIKLAUS.AI | AI Consultant
Apr. 2022 - present | Bern, Switzerland
I consult companies on topics in AI, and especially in NLP. Selected customers: Darrow AI Ltd. (Legal Judgment Prediction in the US)

BERN UNIVERSITY OF APPLIED SCIENCES | Lecturer
Aug. 2021 - present | Bern, Switzerland
I planned and conducted the technical part of the module Software Engineering.
I co-lecture about LLMs in three applied modules on AI.

UNIVERSITY OF BERN | Lecturer and Teaching Assistant
Sep. 2015 - present | 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).

ARTORG CENTER | Data Scientist
Mar. 2020 - Oct. 2020 | Bern, Switzerland
I analyzed Eye-Tracking data for a tele-health application.

AWARDS

2021	Research Grant	60'000 CHF for 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

V. Rasiah, R. Stern, V. Matoshi, M. Stürmer, I. Chalkidis, D. Ho, J. Niklaus
SCALE: Scaling up the Complexity for Advanced Language Model Evaluation
Under Submission at ICLR 2024, Vienna, Austria

J. Niklaus, V. Matoshi, M. Stürmer, I. Chalkidis, D. Ho
MultiLegalPile: A 689GB Multilingual Legal Corpus
DMLR @ ICML 2023, Hawaii, US

J. Niklaus, V. Matoshi, P. Rani, A. Galassi, M. Stürmer, I. Chalkidis
LEXTREME: A Multi-Lingual and Multi-Task Benchmark for the Legal Domain
Under Submission at EMNLP 2023, Singapore, Singapore

J. Niklaus, I. Chalkidis, M. Stürmer
Swiss-Judgment-Prediction: A Multilingual Legal Judgment Prediction Benchmark
NLLP @ EMNLP 2021, Punta Cana, Dominican Republic