

# Joel Niklaus

Schwarztorstrasse 108, 3007 Bern, Switzerland  
joel@niklaus.ai | (+41) 78 664 46 59

## 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 - Jun. 2023 | 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  
(Spring 2017)

## LINKS

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

## 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 • Legal Judgment Prediction •  
Automatic Summarization • Multilingual  
Language Model Pretraining

## EXPERIENCE

### THOMSON REUTERS LABS | DATA SCIENCE INTERN

Mar. 2022 - Aug. 2022 | Zug, Switzerland  
Cheaply Pretraining 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.

### ARTORG CENTER | DATA SCIENTIST

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

### UNIVERSITY OF BERN | TA FOR NATURAL LANGUAGE PROCESSING SEMINAR (BSc/MSc), "PROGRAMMING LANGUAGES" (MSc), "SOFTWARE ENGINEERING" (BSc) AND "COMPUTER NETWORKS" (BSc)

Sep. 2015 - Aug. 2022 | Bern, Switzerland  
I organized and executed practice hours; I composed and corrected lab assignments  
and exams; I organized talks with guest lecturers;

## 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 FIRST-AUTHOR PUBLICATIONS

### J. NIKLAUS, D. GIOFRÉ

Budget-Longformer: Can we Cheaply Pretrain a SoTA Legal Language Model From Scratch?

Efficient Natural Language and Speech Processing (ENLSP) @ Neural Information Processing Systems (NeurIPS), New Orleans, US

### J. NIKLAUS, M. STÜRMER, I. CHALKIDIS

An Empirical Study on CrossLingual and CrossDomain Transfer for Legal Judgment Prediction

Asia-Pacific Chapter of the Association for Computational Linguistics (AAACL), Taipei, Taiwan

### J. NIKLAUS, I. CHALKIDIS, M. STÜRMER

Swiss-Judgment-Prediction: A Multilingual Legal Judgment Prediction Benchmark

In Natural Legal Language Processing Workshop (NLLP) @ Empirical Methods for Natural Language Processing (EMNLP), Punta Cana, Dominican Republic