# Alison Y. Kim, M.A.

Date of Birth: 26.06.1994 Place of Birth: Los Angeles, CA, USA Citizenship: USA **Residence Permit:** L (Swiss university graduate/job seeker) Languages: English (L1), Korean (L1), German (C1), Swiss German (C1), French (B1), Dutch (A1)

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# Summary

Computational linguistics is a beautiful intersection of informatics and the most extraordinary human phenomenon: language. With both skills and enthusiasm for NLP — particularly language modeling, text generation, and sentiment analysis — I have honed my expertise in developing high-performing NLP models and solutions. As a recent Master's graduate, I am excited to apply my NLP and ML skills to large-scale challenges in highly relevant industries.

# Experience

References and more comprehensive list of professional experiences provided upon request.

## 09/2022–07/2023 University of Zurich, Institute for Computational Linguistics, Zurich, Switzerland Master's Thesis: Learning a decoding objective from human-generated text

- Implemented a regression framework using Python ML and NLP libraries (PyTorch, transformers) to learn a decoding strategy for language modeling tasks (text generation, large language models)
- Demonstrated text quality using the learned strategy that is competitive with that of existing decoding strategies, based on standard text generation metrics (e.g. MAUVE, text perplexity)

### **Research Assistant**

- Built a binary classifier for a German sentiment analysis task using Python ML tools (sklearn, PyTorch)
- Conducted data collection, pre-/postprocessing, and feature engineering to optimize classifier performance
- Improved performance of computational linguistics department's in-house German stance detection platform

### **Teaching Assistant**

- Designed curriculum and led weekly tutorials for 60+ students in 2 introductory Python NLP courses
- Provided quantitative and qualitative feedback on 100+ assignments and final exams/projects

#### Gap Year, San Francisco, CA, USA 08/2018-08/2019 Self-learning German, part-time tutoring, traveling

- 01/2017–07/2018 University of California, San Francisco, San Francisco, CA, USA Lab Technician
  - Built soft- and hardware for the lab's first iteration of a behavioral task for mice
  - Utilized data science and ML methodologies (e.g. preprocessing, dimensionality reduction) to analyze complex neurophysiological datasets
  - Developed pipelines for efficient collection and storage of behavioral and physiological data with MATLAB
  - O Mentored undergraduate assistants and assumed lab manager responsibilities

03/2016-01/2017 Abaxis Global Diagnostics, Union City, CA, USA Intern, Process Engineering

- Conducted biochemical experiments and applied regression analysis with MATLAB to identify key sources of contamination in blood analysis devices
- Applied statistical analysis to quantify cost savings and structural improvements achieved by adopting laser welding in device production
- Used Python data visualization tools (matplotlib, pandas) to effectively present results

# Education

- 09/2021–07/2023 University of Zurich, Zurich, Switzerland Master of Arts, Digital Linguistics
- The Wright Institute, Berkeley, CA, USA 09/2019-06/2021 Master of Arts, Psychology
- 08/2012-05/2016 University of California, Berkeley, Berkeley, CA, USA Bachelor of Arts, Physics

	Publications and Presentations
06/2023	<b>Keyword Consolidation</b> P. Ghoshal, <b>A. Kim</b> , N. Bleiker 8th Swiss Text Analytics Conference
04/2023	Gender-tailored Semantic Role Profiling for German M. Klenner, A. Göhring, A. Kim, D. Massey 15. International Conference on Computational Semantics (IWCS)
	Skills
Programming	Python (advanced), SQL (intermediate), BASH (basic), MATLAB (basic), R (basic)
Machine Learning	Supervised learning (regression, classification), deep learning (RNN, Transformer); PyTorch, TensorFlow, sklearn, NumPy, scipy, pandas, matplotlib, seaborn
NLP/NLU	Text generation, large language models (LLMs), sentiment analysis, keyword consolidation, multilingual NLP; Hugging Face (transformers, datasets, evaluate), spaCy, NLTK, gensim, regular expressions
Databases	MySQL, Excel
Other	Version control (Git), containerization (Docker), job scheduling (Slurm)

Markup Languages LATEX, Markdown, XML