VALENTIN VELEV

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in

Konstanz, Germany

EDUCATION

MSc Social and Economic Data Science — October 2023 – Present
University of Konstanz — *Konstanz, Germany*

- Preliminary average grade: 1.1 (German grade)
- Courses: Deep Learning (1.0), Word Representations and Language Models (1.0), Statistical Learning (1.3), Data Mining (1.0)
- Master's thesis (in progress): "Benchmarking Retrievers for Robustness and Generalizability in Retrieval-Augmented Generation Systems" (Supervisors: Prof. Dr. Andreas Spitz and Prof. Dr. Daniel Keim)

BA Political Science — October 2019 – January 2023
Goethe University Frankfurt — *Frankfurt am Main, Germany*

- Final grade: 1.2 (with distinction; German grade)
- Courses: Statistics (1.3), Data Science for Human Geography (1.0)

EXPERIENCE

Teaching Assistant — August 2025 – Present
Department of Computer and Information Science, University of Konstanz — *Konstanz, Germany*

- Led tutorials and provided technical guidance for the master's-level course "Word Representations and Language Models," covering embedding models, the Transformer architecture (including BERT), and generative language models
- Developed and maintained reproducible teaching materials using Python, Git, and LaTeX

Data Science Working Student — March 2025 – Present
Codify AG — *Kreuzlingen, Switzerland*

- Designed and implemented an evaluation pipeline for agentic AI systems using Python, MCP severs (for agent tools), LLM-as-a-judge metrics, and Arize Phoenix (for agent traces)
- Built a conversation evaluation framework for clients to assess model performance on multi-turn tasks
- Integrated end-to-end evaluation workflows and visualizations into production systems using Python, TypeScript, and SQL

Student Research Assistant — April 2024 – February 2025
Center for Data and Methods, University of Konstanz — *Konstanz, Germany*

- Conducted independent quantitative analyses and literature reviews for projects in computational social science, contributing to three peer-reviewed journal publications
- Designed data visualizations and reproducible analysis pipelines in R and Python for publication-quality outputs
- Collaborated on research design, data preprocessing, and statistical modeling using R, Python, Stata, and LaTeX

PUBLICATIONS

Velev, V., & Spitz, A. (2025). gglyph: Network-Style Visualization of Directed Pairwise Relationships. *CRAN package*. https://doi.org/10.32614/CRAN.package.gglyph

Velev, V., & Schmidt-Catran, A. W. (2024). Economic Inequality and Public Support for Redistribution in Europe: A Cross-Sectional and Longitudinal Multilevel Analysis. *International Journal of Public Opinion Research, 36*(4), edae055. https://doi.org/10.1093/ijpor/edae055

Velev, V. (2023). Replication of "Multilevel Models for the Analysis of Comparative Survey Data Common Problems and Some Solutions" with R. *SocArXiv*. https://doi.org/10.31235/osf.io/phq56

SKILLS

Programming: Python, R, Stata, LaTeX, Git, MS Excel, Java, HTML, CSS, SQL (PostgreSQL, MySQL), Tableau, Docker, JavaScript, TypeScript, C++

Languages: English (C2), German (mother tongue), Bulgarian (mother tongue), Dutch (elementary proficiency)