Andreas Küpfer

Computational Social Scientist

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I analyze multimodal political communication, including social media, speeches, and advertisements, using a combination of machine learning models and traditional methods to address substantial questions in Political Science and advance methodological research.

Current Position

2022-present	**Ph.D. Candidate and Research Associate** Technical University of Darmstadt Supervisors: Christian Stecker (Technical University of Darmstadt) and Christian Arnold (Cardiff University)

Education

2019-2022	**M.Sc. Data Science**, University of Mannheim Supervisors: Thomas Gschwend and Denis Cohen Thesis: *When local context trumps party unity: Using Twitter and NLP to explain geographical heterogeneity in legislators' policy communication*
2015-2019	**B.Sc. Business Information Systems**, University of Applied Sciences Karlsruhe
2017	**ERASMUS Student, B.Sc. Informatics**, Metropolia University of Applied Sciences in Helsinki, Finland

Research Visits and Summer Schools

06/2024	**Video Research Institute, Center for C-SPAN Scholarship & Engagement (CCSE) (Bryce Dietrich)**, Purdue University, US
02/2024-03/2024	**Centre for Artificial Intelligence in Government (CAIG) (Slava Jankin)**, University of Birmingham, UK

Publications

2024	[The Role of Hyperparameters in Machine Learning Models and How to Tune Them](#) C. Arnold, L. Biedebach, *A. Küpfer*, M. Neunhoeffer Political Science Research and Methods (PSRM) [Nonrandom Tweet Mortality and Data Access Restrictions: Compromising the Replication of Sensitive Twitter Studies](#) *A. Küpfer* Political Analysis (PA)

Working Papers

2023 **Alignment Helps Make the Most of Multimodal Data**
C. Arnold, *A. Küpfer*

2024 **Structuring Quantitative Image Analysis with Object Prominence**
C. Arnold, *A. Küpfer*

2023 **The Politics of Seeking and Avoiding Discourse in Legislative Debates**
E. Koch, *A. Küpfer*

2022 **Applause and interjections as tools of party competition: Evidence from 70 years of debates in the German Bundestag**
A. Küpfer, J. Müller, C. Stecker
(Under Review)

2022 **The housing crisis on social media: Housing markets and the subnational diversification of policy supply**
D. Cohen, *A. Küpfer*, T. Allinger

Research Dissemination

Conferences

2024 **EPSA**[p], Cologne, Germany

2024 **COMPTEXT**[p], Amsterdam, Netherlands

2023 **IASGP Annual Conference 2023**[p], Mannheim, Germany

2023 **ECPR Standing Group on Parliaments**[p,d,c], Vienna, Austria

2023 **EPSA**[p,d], Glasgow, Scotland

2023 **COMPTEXT**[p,c], Glasgow, Scotland

2022 **DVPW Group Comparative Research on Parliaments**[p], Bremen, Germany

2022 **EPSA**[p], Prague, Czech Republic

2022 **PolMeth Europe**[p], Hamburg, Germany

2021 **PolMeth Europe**, Virtual

p = Presenter, d = Discussant, c = Panel Chair

Press

2023 **Der Frankfurter Wahlkompass VOTO zur OB-Wahl 2023**, FAZ (with Thilo Dieing and Christian Stecker)

2023 **Wahlrecht ab 16, mehr autofreie Zonen und gebührenfreie Kinderbetreuung? Die Positionen der Kandidierenden zur Oberbürgermeisterwahl in Darmstadt in der Online-Wahlhilfe VOTO**, Darmstädter Echo (with Christian Stecker)

2023 **Wahlkompass bietet Orientierung im Kandidatendschungel (FAZ)**, (with Christian Stecker)

2023 **Viele Köpfe und ein breites Angebot. Die Positionen der Kandidierenden zur Frankfurter Oberbürgermeisterwahl**, FAZ (with Christian Stecker)

Web Publications

2023   [BERT and Explainable AI](), Method Bites, Blog of the Mannheim Centre for European Research (MZES) Social Science Data Lab

2022   [Collection, Management, and Analysis of Twitter Data](), Method Bites, Blog of the Mannheim Centre for European Research (MZES) Social Science Data Lab

Software

2022   **triviz**, Triangular visualizations for the significance of pairwise differences from multigroup comparisons (Denis Cohen and *Andreas Küpfer*)

Teaching

2024   **Introduction to Analyis and Comparison of Political Systems**, Undergradute proseminar, Technical University of Darmstadt

2023   **Quantitative Text Analysis in R**, Postgraduate seminar, Technical University of Darmstadt

2023   **Data Analysis: From Data Crawling to Visualization**, Guest Lecture (180 minutes), National University of Kyiv-Mohyla Academy

2023   **Getting started with Python: A how-to guide for social scientists**, Workshop with two sessions à 90 minutes, MZES Social Science Data Lab (with Ruben Bach)

2022, 2023   **Introduction to Quantitative Methods in R**, Postgraduate seminar, Technical University of Darmstadt

2022   **Collection, Management, and Analysis of Twitter Data: Using the Twitter API for Academic Research and BERT**, Workshop (90 minutes), MZES Social Science Data Lab

2017   **IT Security and Operating Systems**, Undergraduate tutorial, University of Applied Sciences Karlsruhe

2016   **Programming II**, Undergraduate tutorial, University of Applied Sciences Karlsruhe

2016   **Introduction to Business Informatics**, Undergraduate tutorial, University of Applied Sciences Karlsruhe

Grants and Awards

APSA Political Communication SPARK Award, 750$ (06/2024) • Athene Award for excellent teaching (TU Darmstadt), 2000€ (11/2023)

Referee

Political Analysis • ZPol

Community Service

Co-Organizer of the 2024 ECPR Summer School on Parliaments (08/2024) • Member of the decision committee for the German public-private scholarship (Deutschlandstipendium) (since 11/2023) • Data infrastructure representative (since 11/2023)

Selected Work Experience (Academia)

03/2021-present	**Student Research Assistant at Social Science Data Lab**, Mannheim Centre for European Research (MZES) (Denis Cohen)
10/2020-12/2021	**Student Research Assistant at Chair of Political Science, Quantitative Methods in the Social Sciences**, University of Mannheim (Thomas Gschwend)
09/2021-12/2021	**Project Data Science and Big Data at Schools Prodabi**, Paderborn University (Rolf Biehler)

Selected Work Experience (Industry)

07/2018-02/2020	**Working Student Data Science/Finance**, SAP SE in Walldorf, Germany
02/2018-07/2018	**Internship Custom Solution Development**, Capgemini in Stuttgart, Germany