

Summary

Computational Social Scientist with 8+ years experience applying computational tools to understand human behavior. Final-year Ph.D. candidate in Sociology at Ecole Polytechnique seeking to apply computational research expertise to hybrid AI development and data analytics. Strong technical foundation in Python, R, and SQL with proven experience in machine learning, statistical analysis, and building data-driven solutions. Experienced working remotely and collaborating with cross-functional teams on AI-powered research tools.

Technical Skills

- **Languages:** R, Python, SQL
- **ML & AI:** transformers, scikit-learn, PyTorch, LLMs (OpenAI, local models), prompt engineering, tidymodels
- **Data Viz:** ggplot2, RShiny
- **Tools:** git, slurm
- **Methods:** Machine learning (supervised/unsupervised), statistical inference, NLP, web scraping

Core Research Skills

- **Data Analysis & Visualization:** R, Python, SQL; Teaching, coursework, and research experience with statistical inference (diff-in-diff, propensity score matching, synthetic control groups), quantitative text analysis (unsupervised and supervised machine learning algorithms), interview transcription (OpenAI Whisper & pyannote) in R and Python; coursework and hands-on experience with SQL and shiny dashboards.
- **AI & Emerging Tech:** Teaching, research, and hands-on experience with prompt engineering and using local LLMs (via ollama) for feature extraction and model fine-tuning for classification tasks (transformers, scikit-learn, PyTorch) in research settings.
- **Mixed Methods Research:** Teaching, coursework, and research experience with qualitative (interviews, close-reading) and quantitative (survey statistics, questionnaire development, experiments, A/B testing) approaches.
- **Communication & Collaboration:** Cross-functional teamwork with international collaborators, presentation of research findings to diverse audiences at 10+ international conferences, mentoring of 10+ student theses, teaching of 10+ courses on undergraduate, graduate, and post-graduate level.

Work Experience

Statistical Horizons

Philadelphia, PA (fully remote)

EXTERNAL CONSULTANT

Oct 2024 - Aug 2025

- Researched and developed AI-focused curriculum, requiring deep analysis of emerging AI architectures and LLM capabilities.
- Analyzed 3+ years of customer-focused user data and created interactive RShiny dashboards to enable data-driven decision making.
- Implemented a full podcast-focused marketing campaign. Targeted podcasts that were popular among customers (scraped and refined social media data to inform strategy).

Leipzig University

Leipzig, Germany (hybrid)

LECTURER

Oct 2021 - Mar 2026

- Developed and taught 10 courses on data science methods including web scraping, NLP, and machine learning in Python and R.
- Co-supervised 10+ Bachelor's and 3 Master's theses.

Stockholm School of Economics

Stockholm, Sweden (fully remote)

LECTURER

Aug 2021 - Sep 2021

- Taught an online course to Ph.D. students on data manipulation and visualization using R.

Linköping University

Norrköping, Sweden (hybrid)

GRADUATE RESEARCH ASSISTANT

Feb 2020 - Jun 2021

- Independently analyzed large amounts of text data for research projects using R and Python and machine learning classifiers (LDA, Naive Bayes, Logistic Regression (Ridge/Lasso), Random Forest, XGBoost) for classification and clustering.
- Web scraped an entire online forum (80+ Mio postings); data set has been used in 3 academic publications and the training of a Swedish LLM so far.
- Assisted in preparation of research articles for journals such as Nature Human Behavior and Science Advances.

University of Regensburg

RESEARCH ASSISTANT AND LECTURER

Regensburg, Germany (hybrid)

Dec 2018 - Jun 2021

- Independently taught 7 undergraduate and graduate-level courses on social network analysis, data wrangling and visualization, and statistical modeling in R.

INSA Consulere

MARKET RESEARCH INTERN

Erfurt, Germany (on-site)

Nov 2017 – Jan 2018

- Created data visualizations that were published in Germany's largest daily newspaper.

Education

Ecole Polytechnique

PH.D. IN SOCIOLOGY

Paris, France

Sep 2021 – Mar 2026

- Specialized in computational methods for analyzing digital behavioral data, combining traditional statistical analysis with modern ML techniques.
- Topic: Seeing Political Polarization through a Fresh Set of AIs (defense: March 4, 2026).
- Co-authored 5 academic papers with a focus on digital traces of human behavior and how to connect them to survey data.
- Presented at 10+ international conferences (e.g., IC2S2), communicating complex findings to diverse audiences.
- Co-organized 2 Summer Institutes in Computational Social Science (SICSS), teaching computational research methods to graduate students and early-career researchers.

Linköping University

M.Sc. IN COMPUTATIONAL SOCIAL SCIENCE

Norrköping, Sweden

Aug 2019 – Jul 2021

University of Regensburg

B.A. IN POLITICAL SCIENCE

Regensburg, Germany

Oct 2014 – Mar 2019

Additional Information

- Work Authorization:** Married to a US citizen, no visa sponsorship required. Additionally, authorized to work in the EU (German citizen).
- Research Stays:** 2 Research visits to Duke University (Durham, NC), Spring term 2024 and Spring terms 2025.
- Awards:** Ph.D. scholarship from Ecole Polytechnique (\$80,000), 2 travel grants for research collaboration by the French National Scientific Center and the German Academy for Sociology.
- Language proficiency:** German (native); English (C2); French (A2).