The Faculty of Social Sciences (Department of Government) of the University of Vienna is advertising

Postdoc in Computational Social Science, especially text analysis (up to 4 years)

<u>Overview:</u>

The position is offered within the MULTIREP project funded by a Starting Grant from the European Research Council (September 2023 – August 2028) and led by Assoz. Prof. Christopher Wratil (personal website).

MULTIREP – "Multidimensional Representation: Enabling An Alternative Research Agenda on the Citizen-Politician Relationship" aims to expand quantitative scholars' understanding of political representation beyond the traditional conceptions of substantive and descriptive representation. In a first step, the project ascertains which dimensions of representation are particularly important to citizens. Based on these analyses, the project will develop novel quantitative text-analytical models and tools to measure how politicians represent citizens in speeches and social media posts on these dimensions. Thereby, MULTIREP aims to reshape the scope and depth of quantitative empirical research on representation and enable an alternative research agenda on the citizen-politician relationship. A description of the project can be found here.

The postdoc will co-lead (together with the principal investigator and in collaboration with a PhD researcher) the development, validation, calibration and application of models that can automatically scale different dimensions of representation from politicians' texts and – potentially – from other modes of politicians' activities using multimodal analytical approaches. This will involve methodological contributions as well as works that apply the models to substantive questions (e.g. of special interest to the postdoc). A key deliverable is an *R* package that makes the models usable for the academic community.

The project is hosted by the Department of Government at the University of Vienna, a vibrant research environment with currently four European Research Council projects and several further third-party funded projects, providing for an international community of PhDs, postdocs and faculty. Key research areas of the Department include political representation, party competition, political institutions and political behavior. For many years, Vienna has consistently been ranked as the most livable city in the world in several international rankings.

Postdoc in Computational Social Science

Job description:

- Develop, validate, calibrate and apply (new) quantitative text / natural language processing models that can infer how politicians aim to represent citizens from legislative speech and social media data
- Publish methodological and substantive research on politicians' representation styles (together with other team members), aiming for manuscript placements in leading political science outlets
- Share responsibility for data collection, data documentation and data management as well as the ethical implementation of research activities
- Co-lead the development of an *R* software package providing easy-to-use access to calibrated models, overseeing and supervising research assistants as well as collaborating with PhD researchers
- <u>Starting date:</u> Any date in 2024 (please indicate preferred date in your cover letter)
- <u>Contract:</u> Up to 4 years
- <u>Salary:</u> approx. €66,500 p.a. gross for a 40 hour/week contract, may be higher with previous postdoc experience ([Austrian take-home pay calculator](#))
- <u>Benefits:</u> paid annual leave, social insurance (incl. healthcare, pension), flexible working hours, home office arrangements, funds to attend further methods trainings and collect large amounts of research data in the framework of the project

Your profile:

- Doctorate/PhD in computational social science, political science, data science, computer science or another relevant discipline (completed or close to completion)
- Emerging research agenda on a topic broadly connected to the themes of MULTIREP with a strong methodological/technical focus, especially on the analysis of text data
- Excellent publication record (e.g. articles in leading disciplinary or methodological journals) or demonstrated potential thereof (e.g. manuscripts under revise and resubmit, prizes)
- Excellent command of and advanced programming skills in *R*
- Interest in political representation
- Strong communication skills, ability to organize and contribute to team work, high reliability, attention to detail, pro-active and responsible attitude, intellectual independence and originality
- Excellent command of English (knowledge of German is <u>not</u> necessary)
- *Desirable* experiences and skills (ANY of this would be an asset):
  - Experience with the analysis of political texts, especially legislative speeches or social media posts of politicians
  - Experience in working with language models (e.g. LLMs, BERT)
  - Experience with developing software packages in *R*
  - Programming skills in Python, JavaScript, C++, Stan or other statistical/programming languages
  - A university degree in computer science (e.g. bachelor, master)
  - Experience in developing new methods in a social science discipline
  - Analysis skills with regard to other modes of human behavior (e.g. visuals, voice, gestures)

Application

Applications should consist of:
- **Cover letter** (incl. discussion of "desirable experiences and skills")
- **Curriculum vitae** (incl. list of publications where applicable)
- **Transcripts of record** from undergraduate and postgraduate study
- **Contact details** of two potential referees

These documents should be compiled in a single PDF file and sent via e-mail to multirep.staatswissenschaft@univie.ac.at as well as christopher.wratil@univie.ac.at by 23:59 CET on **18 March 2024**. Please use the **e-mail title "Application MULTIREP CSS"**. Interviews with short-listed candidates will be held end of March 2024.

For informal inquiries, please do not hesitate to contact the principal investigator, Christopher Wratil, via e-mail: christopher.wratil@univie.ac.at