



LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

DEPARTMENT FÜR GEOGRAPHIE



Research Associate (Postdoc or PhD student) on Modeling Flood Resilience, LMU Munich

The Ludwig-Maximilians-Universität Munich (LMU) is one of the largest and most renowned universities in Germany. The Chair in Human Geography at the Department of Geography offers a **research associate position (Postdoc or PhD student)** to support the research activities in the context of the European Research Council (ERC) funded ERC Starting Grant [STORIES \(ID: 101040939\)](#), led by Dr. Liang Emlyn Yang. This is a 5-year research project funded with 1.5M€ to investigate the dynamic interactions of floods impacts and social resilience in the Mekong River basin. Based on the project, a team of 5-7 people is established to do pioneering and impactful science on climate resilience.

What is offered:

A research associate position of three years at LMU Munich. Starting time is flexible though is expected to be as early as possible in 2024. The position is suitable for doing a PhD thesis or for advancing a postdoctoral research experience. Remuneration will be according to the German TV-L scheme at the E13 or E14 level upon work experience. Further career development will be supported.

Tasks and responsibilities:

The research associate shall concentrate on methodological development of Agent-Based Model and/or Social Network Analysis for studying flood resilience, using case studies at the Mekong basin and also beyond. This includes the implementation of data collections from various sources, algorithm design and development, model construction and coding, as well as contributions to necessary field investigations, surveys and expert interviews, and local workshops.

The researcher will take a leading role in the development of scientific publications, organizing and supporting various activities of the project, and cooperation with members in the project team. The researcher will also contribute to developing new research proposals in the broader field of climate resilience studies.

Required qualifications and experiences:

- Education background in geography or a related discipline in spatial planning, hydrological modeling, geo-informatics sciences, remote sensing, earth observation, machine learning or artificial intelligence, with particular interests in modeling networked human-social systems.
- Strong technic skills and experiences in developing agent-based models, social network analysis, spatial analysis and mapping tools, related AI algorithm and computing expertise.
- Proven skills in qualitative as well as quantitative social science research are preferred. Experience in project management, workshop moderation and organization are advantages.
- Excellent English language skill (written and oral) is prerequisite.
- Willingness to travel for work (field investigations, project meetings, workshops etc.) in China, Vietnam, and other Mekong basin areas is necessary.

Additional assets of interest:

- Expertise in mathematics, statistics, modelling and/or computer programming (e.g. R, Netlogo, Matlab, Python)
- Curiosity and interests in the environmental history, anthropology and culture at the Mekong basin and the Tea-Horse Road area in Southwest China
- Experience in outreach and communication work at the science-policy-interface
- Language skills (written and oral) in German, Chinese, and/or that at the Mekong basin

Application:

The position is negotiable regarding full or part working time. We seek to increase the share of women in scientific positions and therefore explicitly encourages women to apply. People with disabilities who are equally as qualified as other applicants will receive preferential treatment.

Applications shall be submitted by filling the online form and uploading one merged PDF document. The uploaded PDF shall include and merge files of a motivation letter, detailed CV, list of publications, a brief research proposal (2-3 pages), any relevant certificates and other supportive documents, and contact details of at least two potential references (letter of recommendation is not required for the initial application).

All applications will be considered if submitted by **Sunday, 14 January 2024 in Central Europe Time**. We encourage early submissions, which would help disperse our workload of evaluations.

Link to the application form: <https://survey.ifkw.lmu.de/stories-jobs>

Contact:

Questions can be drawn to Dr. Liang Emlyn Yang by email (emlyn.yang@lmu.de). Some relevant information is available on the website of the STORIES project and the PI's personal webpage.

www.erc-stories.com

https://www.geographie.uni-muenchen.de/departement/fiona/personen/index.php?personen_details=1&user_id=342