



Funded PhD

Gender dynamics in collaboration networks

Location: [LIA](#), the computer science laboratory of Avignon University, France.

Advisory Team: [Rosa Figueiredo \(LIA\)](#), [Vincent Labatut \(LIA\)](#) and [Cecile Favre \(ERIC\)](#).

Research area: Computer Science.

Duration: 3 years starting from September–November 2025.

Funding: ANR project [EVA](#) - *EValuating gender policies in academia through the Analysis of scientific collaboration networks*. Standard PhD wage according to French regulations.

Application deadline: 11th May 2025

Context: The ANR project [EVA \(2024-2028\)](#) is dedicated to addressing gender disparities within the realm of academia and research. Focused on the fields of computer science, political science, economics, and sociology, which align with our consortium's research areas, EVA will conduct an analysis of gender dynamics within the geographical scope of France and the broader European space. This project aims to contribute to the ongoing efforts to promote gender equality in the scientific community by objectively assessing the impact and effectiveness of gender-related policies and best practices on scientific publication activity. To bridge the gap between existing research on gender dynamics in collaboration networks and evolving policy landscapes, EVA adopts an interdisciplinary approach, bringing together researchers from political science and network analysis. This collaborative initiative produces a shared bibliometric dataset and maps gender policies and recommendations implemented by political institutions and the scientific community within the same specific temporal, disciplinary, and geographical context.

Objectives of the PhD: This PhD thesis focuses on analyzing gender dynamics within research collaboration networks, using a database of research data developed by other members of the project. The doctoral candidate will explore various methods for extracting and modeling collaboration networks, with an emphasis on understanding gender differences. Through descriptive network analysis, pattern detection in both static and dynamic networks, and the incorporation of time and individual attributes, the project aims to uncover gender-related patterns in collaboration structures across different research domains and countries. The final objective is to develop predictive models and corrective strategies that can obfuscate gender patterns in research networks, contributing to more equitable collaboration practices. The PhD will involve collaboration with Master's degree interns, and experts from the fields of computer science, gender studies, and public policy.

Required Skills and Qualifications:

- Master's degree (or equivalent) in Computer Science, Applied Mathematics, Operations Research, or a related field.
- Strong ability to write and present research clearly.
- Proficiency in Python, R, Julia or C++, with experience in AI and optimization algorithms.
- Good understanding of graph theory, machine learning, and network analysis.
- Ability to work well in an interdisciplinary team.
- Proficiency in English is required, and knowledge of French is an advantage.

Application procedure:

Interested candidates should submit:

- A cover letter **written specifically for this PhD topic**, outlining their research interests and relevant experience,
- A detailed CV,
- Academic transcripts (including Bachelor & Master's/Engineering courses and rankings),
- Up to two reference letters from individuals who have supervised or worked closely with the applicant.

Applications should be sent to rosa.figueiredo@univ-avignon.fr with the subject "Application for EVA PhD Position".

Equal Opportunity Statement:

Female candidates are particularly encouraged to apply. We are committed to promoting a diverse and inclusive research environment.