Postdoctoral position

AI-driven analysis of gendered patterns in cinematography

Application deadline: November 30th

    1. Position summary

The TRACTIVE project funded by the French National Research Agency (ANR), led by Full Prof. Lucile Sassatelli in colaboration with Dr. Hui-Yin Wu, is seeking to appoint a **postdoctoral research position**. The length of the position is 24 months and must begin by March 2024 the latest. The successful candidate will contribute to the rich research program of the TRACTIVE project on AI-driven analysis of gendered patterns in cinematography. The working language is English or French.

The position is funded by ANR through CNRS, and the working environment is on the Université Côte d'Azur (UniCA) campus in Sophia Antipolis, at the UniCA-CNRS computer science laboratory I3S (Signal Image System team), in co-supervision Centre Inria d'UniCA (Biovision team). The postdoc will benefit from the interaction with an extensive network of scholars working on AI (i.e., the Interdisciplinary Institute for AI – 3IA). **Gross salary** starts from 3000€ /month and depends on experience (French social security included).

The scientific objective of TRACTIVE is to characterize and quantify gender representation and objectification in films and visual media by designing an AI-driven multimodal (visual and textual) discourse analysis. To address this objective, TRACTIVE brings together researchers from computer science, media studies, linguistics, and gender studies. The TRACTIVE project already involves two engineers and three PhD students. This postdoc proposal is at the center of the TRACTIVE project, with the following **objective**: Designing explainable deep learning (DL) approaches to identify complex multimodal film editing patterns producing on-screen objectification.

Key-words: Deep Learning, Explainability, Multimodal time series analysis, Film editing patterns, Gender studies

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2. <u>Person specification</u>

Essential criteria
- excellent interpersonal skills, with the proven ability to engage in academic life and activities
- the willingness to be part of a dynamic, inclusive, proactive team, and to engage in respectful and fair teamwork
- excellent organizational capabilities and effective communication and writing skills

Essential role-specific criteria
- PhD in computer science with a strong AI component
- track record of publication in position-relevant and high-profile conference or journals (or working papers submitted/in advanced state)e
- excellent programming skills in Python,
- solid experience with machine and deep learning libraries (tensorflow, torch, scikit learn) and main models (CNN, RNN, Transformers),
- strong competence and prior experience with computer vision and image processing tools and libraries (e.g., opencv, ffmpeg)

3. <u>Application procedure</u>

Candidates should send an application dossier (<u>a single PDF file</u>) via email to Lucile Sassatelli (<u>Lucile.SASSATELLI@univ-cotedazur.fr</u>; the same address can be used for informal enquiries) including:
- CV detailing prior education, project experience and publications
- Motivation letter (*it is strongly recommended to address the context and assignment of the post, and not just the competences*)
- Contacts for 3 references
- Master's transcripts
- Appreciated: personal website, project code repositories

The deadline for submission is 30/11/2023. Candidates are strongly encouraged to submit as soon as possible.

Interviews can take place upon reception of the application.

The project PI reserves the right to extend the deadline and of not assigning the positions.