Researcher (Post-doc) Digital humanities – Picture analysis

Job ID

Functions	Post-doctoral fellow
Job Type	E1D44 – Expert in statistical information; E2D46 – statistical ingineer ; D1A41 – data science ingineer. ; D2A41 – qualitative study engineer.
Type	Teacher-Researcher
Full time job	

Location

Groupe de Recherche sur les Enjeux de la Communication - GRESEC
11 Av. du 8 Mai 1945, 38130 Échirolles

Description of the structure

The major orientation of Gresec is about the emergence of modern communication tools in their developments and their social inscriptions which are at the same time complex, uncertain, even contradictory. This orientation takes into account both the changes that occur in social or cultural mediations, in the form they take (increasingly commercial and even industrial), or in the interactive pluri-modal and "significant" component of devices offered to consumer users.

It is organized into four axes:
1. Industrialization of culture, information and communication (Manager Vincent Bullich)
2. Communication, media and social fields (Managers Jean-Philippe de Oliveira and Roselyne Ringoot)
3. Information communication systems in transformation (Manager Nathalie Walczak)
4. Knowledge, Information and Documents (Responsible Laurence Balicco)

The management of Gresec is ensured by Benoit Laffon and assisted by Viviane Clavier.

The team is made up of 32 teacher-researchers, 5 non-permanent researchers and 45 doctoral students.
The post-doctoral's mission is included in axis 3 - Information communication devices in transformation.
   https://gresec.univ-grenoble-alpes.fr/

Team :

The postdoct will be under the scientific direction of Florence Andreacola (EA GRESEC 608) and surrounded by the research team made up of teacher-researchers: Marie-Christine Bordeaux (EA GRESEC 608), Marie Cambone (EA GRESEC 608) , Frédéric Audra (UMS GRICAD 3758); Glen Cougoulat (UMS GRICAD 3758), Daniel Jacobi (UMR CNE 8562), Sylvia Girel (UMR MESOPOLHIS 7064), Florent Laroche (UMR LS2N 6004).

Missions and main activties

DaMuCo - The creative appropriation of images of digitized works of art from museum databases during periods of confinement and museum closure: dissemination of visual culture, receptions and uses on digital social networks.

Project :

The objective of this project is to study and analyze forms of appropriation and dissemination of visual artistic culture that have emerged in the context of the confinement and closure of heritage institutions: the museum challenges.
Encouraged or aroused by museums, many images created from digitized works in their collections have been actively circulated on digital social networks. This project is based on a vast body of digital images composed, side by side, of an original digitized work of art and its reinterpretation. The corpus of images gathered upstream of this research is analyzed according to three complementary methodological approaches: analysis of the media context ; semiotic analysis and statistical analysis by machine learning on large corpora of numerical data.

End of project: February 2023

Missions :

- Based on the results obtained and the state of the art initiated on the methods of automatic analysis of images applied to works of art, the IA post-doctoral student will continue this bibliographic research while expanding on the work carried out on the automatic analysis of images relating to cultural and social practices.

- The AI postdoct will be required to build an automatic analysis model from a main corpus of work and additional datasets relating to visual elements testifying to the Covid crisis.

- She / he will carry out a dataset recovery campaign (NoSQL base) as well as a designation of the necessary markers (mentioned previously) for the statistical analysis. From a neural network model, the application of clustering methods through the use of unsupervised methods will be applied to the main corpus.

- It is planned that the AI postdoct collects and carries out an analysis of the contents of the press articles produced during the first wave of the Covid-19 epidemic and relating to the phenomenon studied. This international press review work will make it possible to measure the impact and media coverage of the phenomenon and its effects.

Main activities :
- Participation in the development of the semiotic analysis model of the corpus
- Transfer of the semiotic analysis model in the form of a statistical analysis model (development and optimization of the automatic image analysis model)
- Deployment of automatic analysis
- Organization of research promotion activities
- Participation in the writing of a scientific article for a rank A journal.

Objective result(s) setting the end of the agent's mission:
- Production of an automatic image analysis model and report on iteration phases.
- Report of the collection protocol
- Writing of the research report, presenting the results of these analyzes and its integration into the final project report.

Methods of evaluation and control of the achievement of the result(s):
- Report on the research stages in the form of a meeting and monthly stage sheets.
- Monitoring and planning of tasks via a Gantt chart

Profile

Skills required for the position
- *Mastery of Descriptive statistics*
- *Mastery of Python*
- *Knowledge and ability to use automatic image analysis methods*
- *Taste and habit for analyzing images*
- *Sens of observation*
- *Interest in the study of social practices and in particular cultural practices.*
- *Sense of organization*
- *Autonomy*
- *Efficiency*
- *Sense of interpersonal skills and communication*

Background :
Doctorate in human and social sciences and / or computer science.
Experience in advanced statistical analysis is expected : R and Python.

Contract

Deadline for sending applications: November 15, 2021.
Academic CV and motivation letter
Starting date : January 2022
Duration 12 month

Contact information to send the application :
Florence ANDREACOLA, Maîtresse de conférences :
Mail : florence.andreacola@univ-grenoble-alpes.fr