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**-- Post-doctoral research position - L3i - La Rochelle France**

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**Title :** Extraction of graphic elements in comics books for emotion recognition

The L3i laboratory has one open post-doc position in computer science, in the specific field of document image analysis and pattern recognition

**Duration:** 12 months (an extension of 12 months will be possible)

**Position available from:** As soon as possible, 2021

**Salary:** approximately 2100 € / month (net)

**Place:** L3i lab, University of La Rochelle, France

**Specialty:** Computer Science/ Image Processing/ Document Analysis/ Pattern Recognition

**Contact:** Jean-Christophe BURIE (jcburie [at] univ-lr.fr)

### **Position Description**

The L3i is a research lab of the University of La Rochelle. La Rochelle is a city in the south west of France on the Atlantic coast and is one of the most attractive and dynamic cities in France. The L3i works since several years on document analysis and has developed a well-known expertise in 'Bande dessinée', manga and comics analysis, indexing and understanding.

The work done by the post-doc will take part in the context of **SAiL** (Sequential Art Image Laboratory) a joint laboratory involving L3i and a private company. The objective is to create innovative tools to index and interact with digitised comics. The work will be done in a team of 10 researchers and engineers.

The work will consist in developing original approaches for extracting and recognizing graphics elements in comic panels in order to recognize emotions. Authors usually used different strategies for representing emotions such as shape of speech balloon, specific symbols, colour of the faces, etc. These elements are drawn among the other graphic elements (main characters, scenery, ...) making the localisation and the extraction challenging. In order to extract these specific elements, the development of original approaches will be necessary. Deep learning-based strategies can be explored to reach this goal. This work will be done in collaboration with other researchers working on text understanding.

### **Qualifications**

Candidates must have a completed PhD and a research experience **in image processing and analysis, pattern recognition**. Some knowledge and experience in deep learning are also recommended.

### **General Qualifications**

- Good programming skills mastering at least one programming language like Python, Java, C/C++
- Good teamwork skills
- Good writing skills and proficiency in written and spoken English or French

### **Applications**

Candidates should send a CV and a motivation letter to jcburie [at] univ-lr.fr.