

Postdoc position @AMU Marseilles, France

Data Quality-As-A-Service: Computing, Learning, and Querying Data Quality Indicators

- * Position: Post-Doctoral fellow
- * Time commitment: Full-time
- * Starting date: Flexible, beginning from Feb 2019 or thereafter until Sept. 2019
- * Duration: 12 months
- * Indicative salary: Depending on experience from 1,980 Euros to 2,320 Euros net per month (2,460 Euros to 2,890 Euros gross per month) with social security benefits
- * Hosting lab: LIS Lab (CNRS UMR 7020), Aix-Marseille University
Marseilles, France

* How to apply: Send your complete CV including a full publication list (and if possible a link to your PhD thesis) to laure.berti@lis-lab.fr and noel.novelli@lis-lab.fr

The candidate will participate in the extension of a data science platform dedicated to enhancing the quality of healthcare data. The first step concerns prototyping a library of user-defined functions and machine-learning based algorithms for computing data quality indicators and their integration into this platform for real-world healthcare applications. The second step is to extend a query language (SPARQL or SQL) to query data with declaring constraints on their quality. The work will be carried out in the context of QualiHealth, a multi-partner project recently funded by ANR (the French Agency for Research) and the creation of the new line of research initiatives in Data Science and AI at LIS Lab.

* The main missions are:

- (i) Research on user-defined functions for data quality profiling of healthcare data
- (ii) Designing learning algorithms to discover data quality rules
- (iii) Prototyping and testing the query language extension for declaring, manipulating and learning data quality indicators and quality constraints
- (iv) Integration and interfacing with the platform.

* Required Profile:

- Ph.D. in Computer Science
- Experience in machine learning and complex data analysis and/or data management
- Programming skills in Python
- Skills on big-data platforms (Hadoop/Spark)
- Good written and verbal communication skills