

Expert Engineer Position (CDD)

Salary: at least 40k€/year (brut)

Term: 2 years (negotiable), Grenoble, France

Starting date: September, 2016 or ASAP.

Keywords:

Interactive Data visualization, Infographic, Big Data, Web technologies, Time series, Machine Learning

Context

This position is part of IKATS that is a Research and Development project funded by the French government in the frame of PIA program. Partners of this project are : LIG, CSSI, AIRBUS and EDF-R&D.

The IKATS project¹ (Innovative ToolKit for Analysing Time Series) aims to build a software toolbox, providing in the same framework all the tools allowing to manage, to explore, to analyze and to visualize large volumes of "Time Series". Indeed, "Time Series" (i.e. sequences of data points, consisting of successive measurements made over a time interval) are observed in a growing number of scientific and industrial domains, such as: medicine, biology, physics, energy consumption...

The key points of this project is to build a collaborative environment suitable for non-expert users of Data Mining and to set up the "High Throughput Analysis of Multivariate Time Series" pushing the current quantitative limits both in number of time series variables and events analyzed simultaneously.

Job description:

The successful candidate will have to port in a Web environment and/or optimize the visualization tools created by AMA and IIHM teams of the LIG laboratory and to package these algorithms to include them in the IKATS platform. This concerns two different kinds of tools:

- Interactive tools allowing the user to display and explore the raw data (time series)
- Interactive visualization of the models produced by the Machine Learning and analysis tools. These visualizations will be elaborate in collaboration with the researchers producing the algorithms, CSSI company and the end-users of the project.

Requirements:

Qualification: engineering degree or PhD.

Candidate must have a good experience concerning Interactive visualization and data analytics. Some knowledge about Machine learning is desirable. He/she is must have an excellent skill in software development including:

- Python (including Numpy, Scipy, matplotlib), C.
- Graphics libraries: OpenGL, ...
- Web technologies: jQuery, JavaScript, D3.js, WebGL, ...
- Unit testing, code profiling tools, issue trackers ...

A very good communication skill is required.

Speaking languages: french (preferably) and english

¹ <http://www.lemagit.fr/article/IKATS-le-projet-francais-de-Big-Data-industriel>

Location:

The candidate will work in the AMA (<http://ama.liglab.fr/>) and IIHM (<http://iihm.imag.fr/en/>) teams of the LIG laboratory, at Grenoble (France). AMA is a leading group in Machine Learning and Data Analysis covering several aspects of Machine Learning from theory to applications. IIHM is primarily concerned with the software aspects of Human-Computer Interaction and Information Visualization. Grenoble is a town in Alps, not far from Lyon and Geneva.

Application:

The application should include a description of past experiences, a CV, degrees, grades and relevant publications if any. Candidates are encouraged to provide letter(s) of recommendation and contact information to reference persons. Please send your application in one single PDF to both Gilles.Bisson@imag.fr and Renaud.Blanch@imag.fr