Data Scientist in bio-processes

Presentation of BioEnTech

BioEnTech has just completed its fundraising to reinforce our technical team. BioEnTech is an innovative start-up dedicated to anaerobic digestion and wastewater treatment. BioEnTech offers services to model, monitor, analyse, optimise and design biogas plants, and software solutions of monitoring and remote-surveillance of biogas plants, regardless of their size or technology, thanks to our range of Methanisation Monitoring system: MeMo either for industrial units, WWTP, or farm biogas plants.

MeMo is an integrated monitoring solution, which computes key parameters of the process in real-time , automatically analyses the process state and proposes new set point values for the process commands (such as input flow-rate, temperature, pH set point…).

MeMo aims to improve the robustness and performances of biogas processes. To do so, it relies on an in-depth knowledge of anaerobic digestion and the development of computation modules to monitor the process in real-time, to provide early detection of perturbations, and to propose actions to optimize process operation. Moreover MeMo facilitates the collection of any kind of data related to the plant and guarantees its accessibility and traceability.

In addition to the MeMo system, BioEnTech offers a remote-surveliance service to complement the on-line automatic monitoring with the knowledge and expertise of our multidisciplinary team.

Missions

You will have to develop the activities of BioEnTech with the main following tasks:
- Building new tools for data preprocessing, analysis, visualisation and postprocessing
- Developing optimisation algorithms
- Expanding our artificial intelligence tools for the diagnosis of anaerobic digestion and for decision support
- Maintaining and improving our existing code base
- Working with databases
- Improving our data collection system and protocol and participating on the installation of our range MeMo for our customers and prospects (Agro-industrial, food, WWP, Co-digestion units, …)
- Exploiting an existing modelling tools and developing new performing modelling tool for the on-line expertise, the process simulation, the control and the diagnosis of the process.
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BioEnTech
Biomasse Energie Environnement Technologie

You will work in close collaboration with the LBE of INRA for the biological expertise and with INRIA for our system of information dedicated to the bioprocesses.

You will preferably be based in our office in Lyon. Your work shall be shared between LBE, the office work and customer visits in France or abroad.

Your skills

You are graduated from an engineering, mathematics or physics school and you have a good understanding of bioprecesses and/or you have a PhD in bioprocesses with application in Mathematics/Statistics. You wish to invest yourself in an innovative start-up with high potential of development.

Required skills
- Python
- Sequential data cleaning: outlier removal, smoothing, handling missing data, etc.
- Machine Learning, regression modelling and time series analysis
- Artificial intelligence (Fuzzy Logic)
- Numerical optimization
- SQL and TSDB
- Data visualization
- Version control in Git

Desirable skills
- Biotech industrial processes
- Other programming languages: R and Modelica
- Dynamic numerical modelling (ODE, DAE)
- Environmental laboratory analysis
- Other spoken languages: French and/or German
- Unix based OS

Required non-technical skills
- Communicating complex technical findings to a non-technical team
- Sharing knowledge and team-work in a multi-disciplinary environment
- Solid understanding of the industry business problems
- Availability to travel for on-site visits
- Capacity to deal directly with the client
- Good organization skills

You like the team work and make easy contact with people to promote our innovating system. You are organized and efficient in your work.

Type of contract

Full time job

Application

You can send your application to: info@bioentech.eu

If you need further information you can contact:

Jérémie Miroux: email: jeremie.miroux@bioentech.eu, tel: +33 638 195 113