Data Science Internship

Duration: 6 months (Spring-summer 2020)

Location: Marseille, France

Wages: 1.200 € per month

Contact: contact@volta-medical.com

VOLTA MEDICAL

ARTIFICIAL INTELLIGENCE SERVING HEART RHYTHM

Who are we?

Volta Medical is an innovative start-up with headquarters in *Marseille* aiming to provide a range of intelligent software that will guide the cardiologist during surgical procedures. The company was founded following the discovery of a new medical procedure to treat *atrial fibrillation* (the most common cardiac arrhythmia in the world) by the company's founders, world experts in interventional electrophysiology and intracardiac signal analysis.

Decades of research have resulted in a new medical approach in treating atrial fibrillation. To automate this complex procedure, we have developed a first artificial intelligence software. This product builds on artificial intelligence approaches to gain insight into innovative therapies for AF. We embarked on this great adventure over two years ago and are entering a phase of rapid growth, reason why we need top talents!

Our technology has been granted the "Seal of Excellence" by European Commission and has been appraised by newspapers, such as *Les Echos* [1] and *Medtech Insight* [2].

[1] https://www.lesechos.fr/pme-regions/innovateurs/0301772878590-volta-medical-fait-entrer-lintelligence-artificielle-au-bloc-operatoire-2183240.php

[2] https://medtech.pharmaintelligence.informa.com/MT122844/New-AI-Tech-To-Improve-AFib-Treatment-Slated-For-2020-Market-Launch

Mission

With the help of the data science team, in close collaboration with physicians, will be part of the development of a real-time signal analysis software based on deep and machine learning methods.

Outcomes

- Contribute to the development of R&D projects for efficient analysis of physiological electrograms from an anonymous database using classification, regression or segmentation algorithms.
- Contribute to the building of a prototype and its testing.

Skills

In-depth knowledge in:

- Machine learning algorithms (random forests, SVM, t-SNE, PCA etc.)
- Deep learning algorithms (CNN, RNN, Embedding, Image classification & segmentation etc.)
- Data science methods (learning, cross-validation, correlation matrix etc.)
- Model evaluation metrics (classification / regression models)
- Python

Be familiar with:

- C++
- Databases (Postgresql)
- Docker
- Unit testing
- Git

Profile

Dynamic, enthusiastic and committed with a high interest in medicine and new technologies.

How to apply?

If you are interested, send us your CV at the following address: contact@volta-medical.com

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