

RESEARCH
Science & Innovation



Internship 6-8 months

Information & contact



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http://recherche.institutpaulbocuse.com/

Skills & profile

- Machine-learning & deep-learning
- Image processing
- Excellent programming skills in Python
- Experience with parallel, or distributed computing
- Strong skills in linear algebra and statistics
- Experience in the implementation of databases (e.g. SQL, MySQL) is desirable
- Team spirit as well as excellent communication and organizational skills
- Excellent written and spoken English skills

Data scientist - Python & IA

Research Center - Institut Paul Bocuse

The Institut Paul Bocuse Research Center conducts cutting-edge international research on eating practices and gastronomy. From basic research to practical applications, the research center provides a unique interdisciplinary response to the fight against eating disorders.

In the Cognition & Al team, we aim to use recent advances in the field of Al to improve the understanding of eating behavior and facilitate learning of technical gestures specific to the culinary arts. We are working on the creation of tools capable of detecting and recognizing different behaviors and technical gestures, in order to provide researchers, chefs and industries with state-of-the-art tools. We are developing innovative and original solutions that allow for finer and more precise behavioral analysis, and revolutionize the way we learn and teach cooking. We are looking for a data scientist to analyze video data and make their processing automatic.

Your goal : : DeepFooding

Development of DeepFooding, an open-source Pyhton package for: 1. Gestures and motion digitization based on transfer-learning from

- video recordings
- 2. Automatic classification of human behaviors using extracted poses

Your tasks



- Image and video preprocessing
- Performance evaluation and optimisation of deep-learning algorithms
- Implementation of classification algorithms and performance evaluation
- Definition and implementation of an efficient analysis framework, including a common data format to facilitate data access and exchange
- Close cooperation with the team to ensure the transfer of knowledge
- Publication and presentation of your scientific results in international journals and at international conferences