

# HIRING !

R&D

PHD / RESEARCH ENGINEER (M/F)

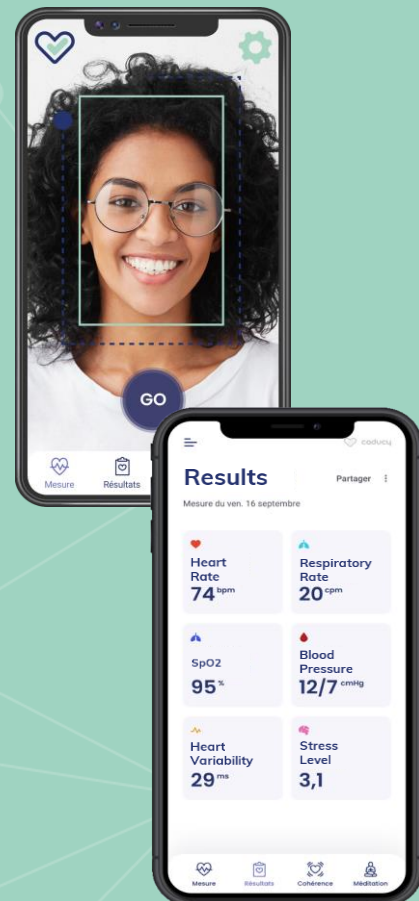
Signal Processing / AI

i-Virtual

i-Virtual is the French specialist in the detection of vital signs by camera. Using advanced signal analysis and artificial intelligence techniques such as photoplethysmography and deep learning, to provide an innovative solution, which measures vital signs remotely, contactless and with a smartphone.

After 7 years of Research and Development, its medical device called Caducy is in the final phase of market access and intends to revolutionize the telemedicine sector by allowing the measurement of physiological parameters by making a simple 30-second video selfie.

Supported by ELAIA and MAJYCC (€2.5M raised in January 2021), major players in the Deeptech and health sector, i-Virtual will build its future in Europe but also on the international scene.



## Job description

The candidate joins the company's research team to participate in the development of solutions for extracting health information from a video stream.

You will develop state-of-the-art techniques to improve our solutions and participate in the accumulation of knowledge and skills of the company.

You will work in a stimulant environment focused on innovation and research.

This position touches on many areas such as signal processing, artificial intelligence, development and databases and require autonomy and an excellent communication skills with other researchers and developers.

You are particularly interested in the new fields of application opened up by the latest scientific advances in your field of expertise.

#METZ  
#STARTUP  
#CDI  
#EHEALTH



PhD / Engineer



Metz / Paris / Partial teleworking

i-Virtual

## Qualifications and experience

### The "knowledge":

- Signal and image processing
- Machine Learning / Deep Learning
- Camera hardware concepts

### The "know-how":

- Prototyping
- Conducting and facilitating interviews
- Data filtering
- Use of collaborative project management system (e.g. Wrike)

### The "know-how to be":

- Excellent organisational, analytical, and systematic troubleshooting skills,
- Excellent communication and interpersonal skills,
- Spirit of analysis and synthesis
- Highly motivated, with a passion for developing tools and methods,
- Dynamic with positive attitude
- Excellent English language level

### Technologies & tools:

- Python, Tensorflow, Keras, Jupyter notebook, Tkinter
- C++, C#
- Access (SGBD), Word, Excel, SQL
- Git

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#CDI  
#EHEALTH

## RESPONSIBILITIES

To participate in the search for solutions related to vital signs measurements by processing video streams.

To participate in the accumulation of knowledge and skills of the company.

### Mission 1: Technological survey

- Keep up to date on all technologies relating to his subject.
- Provide state of the art to other employees on the progress of different technologies.
- Trying to find readings results
- Suggest avenues to explore with regard to the different readings made.

### Mission 2: Implementation of innovative solutions

- Propose innovative methodologies to respond to issues related to:
  - ✓ Processing of images from cameras
  - ✓ The nature of the information linked to the cameras
  - ✓ Data processing

Mission 3: Experimentation As such, he must:

- Set up and make available tools to help with experimentation
- Carrying out the experiments
- Carrying out experience reports.

## Contact us

**recrutement@i-virtual.fr** without forgetting to tell us a few words about **you**, and attaching your **CV**.

i-Virtual