



# Technis

## INTERNSHIP/MASTER THESIS OFFER: DATA SCIENCE

### About us

Technis is a Lausanne-based start-up introducing smart flooring impacting everyday situations and transactions. The innovative aspect of the technology means constant improvement and the implementation of novel ideas are a weekly reality. Every member of the team has been given core responsibilities, supervised by experienced EPFL engineers. Our work atmosphere is defined around elevating every member by becoming better every day whilst enjoying multi-disciplinary challenges in a team displaying various skills and backgrounds (hardware, artificial intelligence, software, web-design, marketing, etc.).

### What will keep you busy

You will work on the core algorithms developed to interpret the data coming from our smart floors in healthcare environments. This means experiment new approaches in order to improve the detection and classification of various events happening in a healthcare room (e.g. fall detection, person tracking, ...).

To achieve this, your work will consist of:

- Review the data generated by our smart floors and evaluate their limitations/challenges.
- Generate and label datasets relative to the tasks at hand
- Propose and explore new approaches for event classification/detection:
  - Pre-processing
  - Features engineering
  - Data modelling
- Implement/evaluate/test the proposed models and algorithms
- Document your research findings

For a Master thesis, a more precise proposal on one subject (e.g. fall detection) can be made.

### Your profile

- Master student in computer science, communication systems or equivalent
- Good knowledge of machine learning, computer vision, signal/image processing.
- Python programming. Knowledge of at least one Deep Learning framework is considered a bonus.
- Curious, autonomous, proactive, rigorous, open to teamwork

**Where** : 1004 Lausanne

**When** : asap

**Duration** : 6 months

If you are interested in joining this amazing adventure, send us your application form (cover letter + resume) at [recruitment@mytechnis.com](mailto:recruitment@mytechnis.com).

Only applications including both cover letter and resume will be processed.