

Project CV Dataset

Title: Data-Warehouse / Data Governance and lifecycle management

Abstract:

Improfit is a company that develops solutions for fitness and rehabilitation based in computer vision for pose estimation where we monitor body movements.

To develop its products, the company makes use of different types of unstructured and structured data and is now undertaking the process of structuring its data lifecycle, from acquisition to disposal. Data governance is especially important in health-tech companies, because of the additional complexity posed by the management of personal data.

You will be working in defining data processing pipelines for both structured and unstructured data such as sequences in time of pose landmarks, pose classification results, RGB and RGBD image captures from single and multi-camera sources, with the goal of establishing a traceable lifecycle of raw data source as well as processed data.

Once the data ingestion process is defined and implemented, additional efforts will be needed to properly secure, anonymize or pseudo-anonymize raw data using techniques such as image blurring, pixelation, morphing or masking as well as secure encryption of structured data.

The final application of the project will be the creation of the foundations of a data-warehouse specifically aimed at improving custom pose estimation models, enriching data using supervised or self-supervised techniques.

Some of the tasks you will be involved with:

- Defining data processing pipelines
- Data wrangling and exploration
- Supervised and self-supervised data labeling
- Image processing for anonymization
- Ensure data security and compliance with relevant regulations and policies
- Develop documentation for datasets and data pipelines

- Collaborate with cross-functional teams to ensure that data are integrated seamlessly into the improfit.ai platform

The dataset will play a crucial role in the Improfit project by enabling the development and training of algorithms for evaluating and quantifying body movements for fitness and rehabilitation in real time.

General information and location:

Our company Improfit is already working with some hospitals and with the market leader in the fitness industry.

There is a computer vision team and software engineers with computer vision products which are already in the market.

The office is Barcelona Health Hub which is inside Hospital Sant Pau (recinte modernista)

