

# Alessandro Lorenzi

✉ lorenzi.alessandro19@gmail.com    ☎ +39 345 00 44 383    🌐 alessandrolorenzi.it  
in alessandro-lorenzi-48a6131b5    🏠 lorenzialessandro

## Education

- 
- Master Degree in Artificial Intelligence Systems** *Sept 2023 – current*  
*University of Trento, Italy*
- Bachelor Degree in Computer Science** *Sept 2020 – July 2023*  
*University of Trento, Italy*
- Thesis title: *Design and development of management software.*

## Experience

- 
- IT Consultant and Developer** *Trento, Italy*  
*Dream S.R.L.* *Sept 2022 – Sept 2024*
- Supporting business consulting with a focus on digital transformation projects, including process modernization projects and the creation of custom management solutions tailored to client needs.
  - Work primarily on the development of software systems and client applications.
- Developer and Video scouting** *Torrebelvicino, Italy*  
*Avolley GSP Torrebelvicino* *Jan 2020 – July 2023*
- Sports scout for volleyball club: video processing and advanced statistics.
  - Technical and front-end development manager for internal applications in a sports club.

## Projects

- 
- Motion Capturing** *[github folder](#)*
- Create dynamic 3D models of skeletons and rigid bodies from motion data.
  - Mitigate flickering and inconsistencies in motion caused by marker loss.
  - Tools used: Python, Unreal Engine 5, and Blender
- Improving Model Robustness with Test-Time Augmentation (TTA)** *[github folder](#)*
- Implement and apply Test-Time Augmentation (TTA) techniques for enhancing model robustness and improving accuracy during inference.
  - Evaluated model performance with and without TTA, demonstrating improved accuracy and stability.
  - Tools used: Python, PyTorch, TensorFlow, Keras
- Job-shop scheduling (*Industrial AI Challenge. Client company: LeMur*)**
- Optimize job scheduling and machine assignments, addressing constraints like machine compatibility, maintenance, operator shifts.
  - Incorporate evolutionary algorithms for refining solutions, including handling overlapping operations.
  - Provide an interactive GUI for input/output management and schedule visualization through Gantt charts.
  - Tools used: Python, Google's OR-Tools, and advanced algorithmic frameworks.
- CLIP on Low-Resource Vision**
- Address class imbalance in low-resource datasets in context of few-shot learning.
  - Evaluate and experiment advanced fine-tuning techniques to handle the long-tail data distribution issue, through complex metrics and visualization analysis.