

# NICOLETTA SILEONI

Biomedical Engineer

## CONTACT

## PROFILE SUMMARY

I am a Biomedical Engineer passionate about innovation and advanced biomedical technologies. Curious and determined, I thrive on challenges and excel in both team environments and independent work. I am eager to find a position where I can apply my skills and knowledge to develop cutting-edge solutions that improve healthcare and patients' quality of life.

## SKILLS

- Software CAD CAE CAM FEM (Solidworks, Auto-CAD, Ansys)
- Matlab
- Software di slicing (Cura, Slic3er, Meshlab, Mimics)
- Opensim
- COMSOL Multiphysics
- Software for motion capture (Vicon Nexus)
- Powerpoint, Excel, Word

## WORK EXPERIENCE

**IRCCS Rizzoli Orthopaedic Institute** 2023 - present  
Bologna, Italy

**Early-stage Researcher** at the Movement Analysis Laboratory and Functional Evaluation of Prostheses

- Clinical data acquisition through gait analysis using optoelectronic systems, stereophotogrammetric systems, inertial measurement units, force plates, and surface electromyographic systems (EMG).
- Development of scripts for managing, processing clinical data, and extracting parameters of interest.
- Statistical analysis of data for interpretation and analysis of results

**IRCCS Rizzoli Orthopaedic Institute** 2022 - 2023

**Internship** at the Movement Analysis Laboratory and Functional Evaluation of Prostheses

- Gait Analysis data processing, review of results statistical analysis using various statistical tools: Matlab e Statistical Parametric Mapping.

## LANGUAGES

- English: B2 (speaking-reading)
- Italian: native

**DRIVING LICENSE: B**

## EDUCATION

**Professional Practice Exam**  
**Qualified Engineer** 2024

**Master's Degree in Biomedical Engineering**  
**Biomedical technologies**  
University of Pisa, Italy 2020 - 2023

**Bachelor's Degree in Biomedical Engineering**  
**Curriculum Industriale**  
University of Pisa, Italy 2016 - 2020

## SCIENTIFIC PUBLICATIONS

**2024** Belvedere et al. - Instrumental Gait Analysis and Tibial Plateau Modelling to Support Pre- and Post-Operative Evaluations in Personalized High Tibial Osteotomy. Applied sciences.

**2024** Poster ESSKA "Personalized High tibial osteotomy is highly effective, evidenced by clinical-functional evaluations from a novel clinical study

**2024** Abstract IDBN 2024 "Recupero funzionale dopo osteotomia tibiale alta personalizzata supportato da nuove metodiche di valutazione.

Consapevole delle sanzioni penali, nel caso di dichiarazioni non veritiere, di formazione o uso di atti falsi, richiamate dall'art. 76 del D.P.R. 445/2000, dichiaro che il curriculum vitae da me redatto ha valore di autocertificazione di quanto in esso contenuto ai sensi degli artt. 46 e 47 del D.P.R. 445/2000.

Autorizzo il trattamento dei miei dati personali ai sensi del D.lgs. 196 del 30 giugno 2003 e ss.mm.ii. e del Regolamento UE 2016/679 (GDPR) ai fini della ricerca e selezione del personale.