

# Curriculum Vitae - Alessio Di Serafino

## Personal Information

First name / Surname: Alessio Di Serafino

Address: 00148 Rome, Italy

Telephone: +39 346 5112102

Email: diserafino.alessio@gmail.com

Date of birth: 12.05.1996

Nationality: Italian

## Job Applied For

Biomedical & Electronic Engineer / Researcher in Biosensors and Medical Technologies

## Work Experience

Dates: 2024/2025

Occupation or position held: BioSensor Engineer

Name and address of employer: BioMed X, Heidelberg, Germany

Main activities and responsibilities:

- Developed and optimized plasmonic optical fiber biosensors for biomarker detection
- Performed data analysis and interpretation to assess sensor performance
- Managed advanced optophotonic setup and data acquisition software
- Applied microfabrication techniques and surface plasmon resonance (SPR) for biosensing experiments
- Developed implantable electrochemical sensors for in vivo drug monitoring using DNA aptamers and hydrogel coatings
- Hands-on work in cleanroom environments

Dates: 09/2023 - 03/2024

Occupation or position held: Intern

Name and address of employer: Instituto Pedro Nunes, Coimbra, Portugal

Main activities and responsibilities:

- Engineered poly(ester amide)-based membranes with antibacterial properties through electrospinning
- Optimized parameters like voltage, flow rate, and fiber morphology
- Characterized membranes using SEM, FTIR, contact angle measurements
- Utilized Excel for data monitoring and quantitative evaluations

## Education and Training

Dates: Master's Degree

Title of qualification awarded: Biomedical Engineering

Organisation: Alma Mater Studiorum, Università di Bologna (International track)

Principal subjects/skills covered:

- Biomedical Signal Processing, Machine Learning
- Biomedical Instrumentation, Numerical Analysis
- Quantitative Modelling in Biology, Wearable Sensors

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- Computational Cardiology, Biomechanics, Nanobiomaterials
- International experiences: Universität Bern (Switzerland), Universidade de Coimbra (Portugal)

Dates: Bachelor's Degree

Title of qualification awarded: Electronic Engineering

Organisation: Università degli Studi di Roma Tre

Principal subjects/skills covered:

- Analog and digital electronics, circuit design
- Signal theory, electromagnetics, photonics
- Electrical engineering fundamentals

Dates: High School Diploma

Title of qualification awarded: Scientific High School Diploma

Organisation: Liceo Scientifico Statale Marcello Malpighi, Rome

### Personal Skills

Mother tongue(s): Italian

Other language(s):

- English: Professional
- Spanish: Intermediate
- Portuguese: Intermediate
- German: Basic

Communication skills: Strong communication, active and motivated, team experience

Organisational / managerial skills: Organization skills, reliable and serious

Job-related skills: Expertise in biosensors, microfabrication, electrospinning, and optical systems

Digital competence: Microsoft Office Suite, MATLAB, Python, Data analysis software