

Career Goal

A resource oriented towards commitment and sacrifice, and strongly passionate about the topics addressed during my academic and professional career, I would like to contribute to the development of the world of biomedical engineering by applying the skills acquired so far to challenging projects that have as their object innovation, medical devices and research.

FOREIGN LANGUAGE SKILLS



MOTHER TONGUE(S): Italian



ENGLISH
GOOD

B2 B2 B2 B2 B2

DIGITAL COMPETENCES

DigComp

Information and data literacy **Proficient user**

Communication and collaboration **Proficient user**

Digital content creation **Proficient user**

Safety **Independent user**

Problem solving **Proficient user**

EXPECTATIONS AND FEATURES OF THE DESIRED JOB

INTENTION TO CONTINUE STUDIES: **Yes** /
Doctoral studies

DESIRED JOB: **Biomedical engineer**

PREFERRED DISTRICT TO WORK IN: **1.**
FIRENZE / **2. PISA**

AVAILABILITY FOR BUSINESS TRAVELS:
Yes, including relocation

AVAILABILITY TO RELOCATE ABROAD:
Yes, even in non-European countries



WORK EXPERIENCES

Assistant researcher in Internet of Things and Embedded Systems UNIVERSITÀ DEGLI STUDI DI FIRENZE

Biomedical
FIRENZE (FI)
01/2024 - TODAY

Main activities and responsibilities: Biomedical Engineering Researcher

Acquired skills and achieved objectives: Programming in integrated development environments (IDE) using C/C++/C#/Python language and use of machine learning and deep learning libraries (Matlab).

Firmware programming for STM32 uC, including Bluetooth 5.x modules.

Git and GitHub usage.

Knowledge and experience of computer, sensor and embedded system architectures.

Repair, calibration, maintenance and monitoring of clinical / patient care equipment technologies, devices, instruments, and systems in hospital and at home.

Presentation of innovative medical devices to medical doctors, facilitating the adoption and purchase of new technological solutions.

Development of Robotics, IoT, Cloud and 3D Printing technologies and tools in the UNIFI Biomechatronics Team on European and national projects to support active aging (e.g. Pharaon, Olimpia).

| Company sector: Engineering and design

Digital Marketing ERICA LI CALZI FOODBLOGGER

Food
FIRENZE (FI)
01/2022 - TODAY

Main activities and responsibilities: Digital marketing and social advertising activities for clients in the Horeca and Food&Beverage sectors; autonomous entrepreneurial management of business development activities, economic analysis, reporting and bureaucratic/legal/administrative activities for a personal showcase page with over 10,000 followers.

Acquired skills and achieved objectives: Ability to manage corporate finance for the entire production cycle with economic commitment, deadlines and challenging objectives and associated responsibilities.

Application and development of negotiation skills, time management, effective communication and problem solving.

Working as: other, self employed | Company sector: Marketing/Communication

Private Teacher FREELANCER

Education, training,
research and development
PRATO (PO)
01/2017 - TODAY

Main activities and responsibilities: Teaching mathematics, physics, chemistry and English to university and high school students. Preparation for competitions and entrance tests to university faculties on scientific subjects.

Acquired skills and achieved objectives: Strengthening students' involvement and motivation skills, as well as pedagogical, disciplinary and personal development skills.

In-depth study of the cognitive and psychophysical processes of the mental and affective-relational development of learners.

Transfer of effective planning and problem solving methodologies.

Working as: freelance worker | Company sector: Human Resources

Biomedical Engineer

UNIVERSITY OF FLORENCE

Biomedical
(FI)
02/2023 - 12/2023

Main activities and responsibilities: Implementation of Matlab projects and procedures for Alzheimer's disease detection. Development of optimized software for Alzheimer's diagnostic analysis.
Biomedical signal data processing.
Employed as: intern/trainee - internship | Company sector: Engineering and design

Lifeguard

BAGLIO ONETO PRINCIPI DI SAN LORENZO - LUXURY RESORT

Commerce, hotels, public activities (chemist's shop included)
MARSALA (TP)
06/2021 - 08/2022

Main activities and responsibilities: Safety management, accident prevention and monitoring of swimmers' activities inside and outside the pool.
Supervision of compliance with internal regulations within the managed perimeter.
Ordinary and extraordinary maintenance of the swimming pool.
Acquired skills and achieved objectives: Strengthening problem solving skills and customer approach management; improved communication skills and fluency in spoken English.
Employed as: other - fixed-length contract | Company sector: Organization

Cashier and Waitress

A.C.M.E. SRL

Food
PISA (PI)
06/2019 - 08/2019

Main activities and responsibilities: Cash management and table service.
Preparation of the restaurant room and customer reception.
Acquired skills and achieved objectives: Aptitude for service and ability to work in a team.
Resistance to fatigue and stress, dynamism and speed.
Enhancement of relational and communication skills, speed of calculation and payment management of multiple rooms. In-depth knowledge of the food and wine sector.

Disability Support Worker

O.A.M.I.

Biomedical
SPOLETO (PG)
07/2017 - 08/2018

Main activities and responsibilities: 24-hour assistance and physical and psychological support for people with disabilities on excursions and guided tours.
Travel organization and resource planning based on the specific needs of the participants.
Acquired skills and achieved objectives: Development of the ability to manage emergency and stressful situations, active listening and interception of specific needs.
Volunteer activities

Medical Laboratory Assistant

OSPEDALE DI PRATO - S. STEFANO

Biomedical
PRATO (PO)
05/2017 - 06/2017

Main activities and responsibilities: Support to the Hospital Laboratory Manager on blood and urine analysis activities.
Preparation of work material and management of the patient archive.
Acquired skills and achieved objectives: Recognition of diseases and infections through microscopic analysis.
In-depth study of laboratory dynamics and techniques for using and maintaining medical instruments.
Employed as: intern/trainee - fixed-length contract | Company sector: Organization

Front Line Medical Receptionist

MISERICORDIA DI PRATO

Biomedical
PRATO (PO)
05/2016 - 06/2016

Main activities and responsibilities: Welcoming patients in the room and managing the entire perimeter of the practice's back office activities.
Management of bookings and doctor-informant relationships; support in planning the doctors' personal agenda, invoicing, collection and processing of personal data and maintenance of the patient archive.
Acquired skills and achieved objectives: Improvement of the ability to relate to the public, to build professional relationships based on esteem and trust and in-depth analysis of the dynamics relating to the medical-health world.
Employed as: intern/trainee - fixed-length contract | Company sector: Secretary



MASTER'S DEGREE

ACADEMIC STUDIES

Università degli Studi di FIRENZE



2021 - 2023
CERTIFIED TITLE

BACHELOR'S DEGREE
2017 - 2021
CERTIFIED TITLE



SCIENTIFIC CERTIFICATE
PRATO
2017

Scuola di Ingegneria
Biomedical Engineering

LM-21 - 2nd level degree in Biomedical engineering

Dissertation/thesis title: Assessing the Interplay Between Motor and Cognitive Aspects in Mild Cognitive Impairment Using Innovative Bioengineering Techniques and Statistical Parametric Mapping | Dissertation/thesis subject: Biomeccatronica | Thesis supervisor: CAVALLO FILIPPO|ROVINI ERIKA | Dissertation/thesis keywords: MCDT, Biomechatronics, Wearable Sensors

Age at graduation: 24 | Official duration: 2 years

Final degree mark: **110/110 cum laude**

Graduation date: 01/12/2023

Università di PISA
Dipartimento di Ingegneria dell'Informazione
INGEGNERIA BIOMEDICA

specific field of the degree course: industriale
L-8 - 1st level degree in Information technology

Dissertation/thesis title: In vitro models for absorption and toxicity studies on physiological barriers: the blood-brain barrier | Thesis supervisor: COSTA JOANA|AHLUWALIA ARTI DEVI

Age at graduation: 22 | Official duration: 3 years

Final degree mark: **97/110**

Graduation date: 23/04/2021

Scientific High School

A. GRAMSCI-J.M.KEYNES , PRATO (PO)

School-leaving examination mark: **100/100**

Kind of secondary school diploma: Italian secondary school diploma

Kind of secondary school attended: Public school



INFORMATION TECHNOLOGY SKILLS

OFFICE AUTOMATION

Office Suite: (Advanced) | **Presentation Software:** (Intermediate) | **Spreadsheets:** (Advanced) | **Web Browser:** (Intermediate) | **Word Processors:** (Advanced)

APPLICATION SOFTWARE

CAD - Assisted Design: (Intermediate)

COMPUTER PROGRAMMING

Development Models: Analisi agli elementi finiti (Intermediate) | **Integrated development environments (IDE):** (Advanced) | **Programming languages:** C (Advanced) , C# (Intermediate) , C++ (Intermediate) , MATLAB (Advanced) , Python (Advanced) , Signal Processing (Advanced) | **Web Programming:** (Intermediate)

SYSTEMS AND NETWORKS MANAGEMENT

Network architecture: (Advanced) | **Operating systems:** (Highly Specialised)

DATA MANAGEMENT

DBMS: (Foundation)

GRAPHICS AND MULTIMEDIA

(Intermediate)

SECURITY

Cryptography: (Intermediate)



CONFERENCES AND SEMINARS

WORKSHOPS
16/12/2022

Seminario sulla robotica sociale , Camera di Commercio di Firenze
Presentation of various research devices in the field of social robotics for the assistance of children, the elderly and the disabled.
Character: Studente

CONFERENCES
15/12/2022

New Frontiers in Robot-assisted Therapy and Education , University of Waterloo, Canada , Telematica
Robot-assisted therapy for children with special needs and

WORKSHOPS

15/11/2022

supporting independent living for older adults.

Curatorship: Kerstin Dautenhahn

Character: Studente

Oxford Nanopore Cancer Research Seminar 2022, European Institute of Oncology, Innovation Center of Fondazione CR Firenze, Lungarno Soderini 21, 50124 Firenze

The latest technical updates for Oxford Nanopore Technologies as well as talks from local scientists about their latest work using nanopore technology.

Curatorship: Piergiuseppe Pellicci

Character: Studente

WORKSHOPS

26/05/2022

Ingegneria clinica basata sulle evidenze, Università degli studi di Firenze, Università degli studi di Firenze

Seminar on evidence based maintenance, with particular attention to nomenclature and ontology aspects, the use of adverse event databases and the application of an approach based on natural language processing to clinical engineering.

Curatorship: Ing. Fabrizio Dori

Character: Studente

WORKSHOPS

10/05/2022

Seminario e confronto tra esperti - Dispositivi Medici e Dispositivi Medico-Diagnostici in Vitro, Università di Pisa, Pisa Aula Magna Largo Bruno Pontecorvo 3 (edificio E)

State of the art of the application of the previous product Directives in relation to the new European Regulations and its implications for health and safety at work

Curatorship: Luisa Pellegrini

Character: Studente



PUBLICATIONS

CONFERENCE PROCEEDINGS

2023

G. Mancipopi, E. Li Calzi, V. Manera, R. Zeghari, C. Dolciotti, P. Bongioanni, L. Fiorini, A. Gros, P. Robert, F. Cavallo, E. Rovini, Innovative motor and cognitive dual-task for mild cognitive impairment early detection

Organization: The department of industrial engineering, university of Florence, Florence, Italy

This study aims to identify clinical markers for the early detection of cognitive decline by expanding the standard motor and cognitive dual-task (MCDT) framework and examining the impact of increasing cognitive loads (CLs) on the dual-task (DT) performance of cognitively normal adults (CNA) and Mild Cognitive Impairment (MCI) patients.

amsacta.unibo.it/id/eprint/7383/1/Proceedings%20...