



Vincenzo Lucio Caputo

Biomedical Engineer - Clinical Engineer

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EXPERIENCE

Project Manager - I.R.C.C.S. Policlinico San Donato

San Donato Milanese, Italy Sep 2024 - Ongoing

Manager of a multicenter clinical research project at the Arrhythmology and Electrophysiology Unit (Head: Carlo Pappone, MD, PhD, FACC, FESC) with a focus on: clinical data management and data quality; operational coordination; regulatory and documentation drafting; protocols development and integration; digital systems and reporting; procurement and stakeholder engagement.

The project aim is to identify a novel prognostic Atrial Fibrosis Score, in order to predict the occurrence and progression of Atrial Fibrillation disease by using Machine-Learning models.

Internship - I.R.C.C.S. Policlinico San Donato

San Donato Milanese, Italy Mar 2024 - Aug 2024

- Internship experience at the Clinical Engineering Office.
- Project work at the Arrhythmology and Electrophysiology Medical Department in collaboration with Dr. Emanuela Locati and Prof. Dr. Carlo Pappone for the drafting of the degree thesis about a Technical Appraisal of the Remote Monitoring of Cardiac Implantable Electronic Devices (CIED).

Internship - I.R.C.C.S. CROB

Rionero in Vulture, Italy Sep 2019 - Dec 2019

Study and internship experience at the Technical Office, in particular at the Clinical Engineering Service, for the drafting of my degree thesis regarding the Electrochemotherapy (ECT) cancer treatment.

- Study of the biophysical aspects, the device (Cliniporator - IGEA), its application and the results of the treatment on patients treated at the IRCCS CROB

- Evaluation of the technology (Health Technology Assessment)

- Study of acquisition and testing procedures at the IRCCS CROB, in particular for Cliniporator device.

EDUCATION



Politecnico di Milano - Master's Degree
Biomedical Engineering - Clinical Engineering

Milan, Italy
Feb 2022 - Ongoing

Health Care Management - Analysis and Organization of Health Care Systems - Clinical Technology Assessment - Management of Organizations and Projects - Certification and Regulatory Activities for Medical Devices - Hospital Facilities and Safety - Medical Informatics



Sapienza Università di Roma - Bachelor's Degree
Clinical Engineering

Rome, Italy
Graduation date: May 2020

CERTIFICATIONS



Cambridge CEFR Level B2
Cambridge University Press & Assessment English

Sep 2020



ECDL European Computer Driving Licence
AICA - Associazione Italiana per l'Informatica e il Calcolo Automatico

Apr 2012

MAIN PROJECTS

DeMood: a home-monitoring system for mood disorders' patients

Project as part of the course Medical Informatics for the design and development of a monitoring system (App) to track physiological changes in patients with mood disorders and support self-management of their mental health.

- Brainstorming and development of Textual Descriptions, Use Case Diagrams, Activity Diagrams and Class Diagrams
- Digital network between patient, psychiatrist and psychologist

Hackaton AMGEN - Hack to KRASh barriers

Competition organized by AMGEN Inc. one of the world's leading biotechnology companies.

- Design of an end to end service to enable KRAS G12C (lung cancer) screening, involving target patients
- Meeting with the national main stakeholders and focus on their needs
- Design of service delivery process
- Release plan of the service

Value-Based Procurement: Methods of Payments, an Application Case of a P4P Framework

Project as part of the course Health Care Management, carried out at Politecnico di Milano under the supervision of Prof. Emanuele Lettieri and in collaboration with IRCCS Humanitas Research Hospital.

A framework, result of the combination of a financial and clinical Risk Assessment, Hospital-based HTA (EUnetHTA Core Model 3.0) and Multi-Criteria Decision Analysis (MCDA – EVIDEM model), was designed and created to identify the best Value-based Procurement model for a technology among: Pay for Performance (P4P), Bundle Payment (BP) and Risk Sharing (RS). Then it was applied to a coverslipper at Humanitas Hospital.

Decision tree modelling: treatments for Pediatric Chronic Rhinosinusitis (CRS)

Development of a Cost-Effectiveness Analysis for Adenoidectomy alone versus Adenoidectomy with up-front Balloon Catheter Dilation (BCD) in the treatment of Pediatric Chronic Rhinosinusitis.

- A Decision-Tree deterministic analysis was performed, assigning expected value of effectiveness outcome and cost to each procedure.
- Incremental Cost Effectiveness Ratio (ICER) computation and comparison to identify the best procedure based on a chosen Willingness to Pay.