Hi, I'm Matteo Orlando

Whoami | Career | Publications | Projects

What I studied

I received B.Sc Degree in Physics Engineering in 2015 and a M.Sc. degree in ICT for Smart Societies in 2018 with a thesis focused on designing and development of a self-configuring IoT smart-meter for monitoring the power grids and enabling novel services. Since October 2018, I joined the EDA group as a research assistant. I started my PhD in November 2019 focusing my research in the optimization of the placement of PV modules in the context of Renewable Energy Community.

Technical skills

Main

Python | REST API | MQTT | Microservices | IoT | Smart-Grid

Other

Javascript | Astro | Vue | HTML & CSS | MongoDB | Docker | Git

My career

2012-2015

Politecnico di Torino

Bachelor degree in Physisc Engineering

2015-2018

Politecnico di Torino

Master degree in ICT for Smart Societies with the thesis "Desing and development of a novel smart-meter for improved Smart Grid management"

2018-2019

Politecnico di Torino

Assistant researcher for EDA group

2019-ongoing
Politecnico di Torino

PhD student in Computer and Control Engineering

My Publications

A novel Internet-of-Things infrastructure to support self-healing distribution systems
2018 International Conference on Smart Energy Systems and Technologies (SEST)
Read the full paper here

▸ Abstract

Engaging Users in Resource Ecosystem Building for Local Heritage-Led Knowledge
Sustainability-MDPI
Read the full paper here

▸ Abstract

Optimal configuration and placement of PV systems in building roofs with cost analysis novel Internet-of-Things infrastructure to support self-healing distribution systems
2020 IEEE 44th Annual Computers, Software, and Applications Conference (COMPSAC)018 International Conference on Smart Energy Systems and Technologies (SEST)
Read the full paper here

▸ Abstract

Design of District-level Photovoltaic Installations for Optimal Power Production and Economic Benefit
2021 IEEE 45th Annual Computers, Software, and Applications Conference (COMPSAC)
Read the full paper here

▸ Abstract

A Smart Meter Infrastructure for Smart Grid IoT Applications
IEEE Internet of Things Journal
Read the full paper here

▸ Abstract

A Resources Ecosystem for digital and heritage-led holistic knowledge in rural regeneration
Journal of Cultural Heritage
Read the full paper here

▸ Abstract

Other projects I worked on

Ruritage

2018-2021

The RURITAGE project turns rural areas into laboratories to demonstrate natural and cultural heritage as an engine for regeneration. I was in charge of the development of the first version of the Ruritage Resource Ecosystem. This tool consisted in a full stack application that stored geographical data and metadata about the partecipants of the project and make it available to the public for visualization.
More info at ruritage-ecosystem.eu

Development of a wearable IoT device for Covid-19 early diagnosis.

2021

Cotutor of the thesis.
More info at here

Development of a wearable device for monitoring vital parameters: SpO2, heart rate and temperature.

2021

Cotutor of the thesis.
More info at here

Design and development of distributed software platform to gather, manage and visualize multimedia clinical files

2021

Cotutor of the thesis.
More info at here