Alessandro Flamini

WORK EXPERIENCE

SAPIENZA UNIVERSITY OF ROME – ROME, ITALY
Department DIAEE- Dipartimento di Ingegneria Astronautica, Elettrica, Energetica

PH.D. STUDENT – 01/01/2022 – CURRENT

- Energy monitoring
- Digital Twin
- IoT
- Building Automation
- Domotics

D.R.E.A.M. S.R.L. – ROME, ITALY
Email ingegneria@dream-energy.it | **Website** https://www.dream-energy.it/

TECHNICAL CONSULTANT – 01/01/2023 – CURRENT

- Digital Twin developer
- Building Automation systems designer
- Domotics system designer
- Energy monitoring platform developer

D.R.E.A.M. S.R.L. – ROMA, ITALY
ACTIVE PARTNER – 03/2025 – CURRENT

EDUCATION AND TRAINING

25/09/2024 – 30/10/2024 Rome, Italy
ACADEMY STUDI TECNICI MECCANICI Schneider Electric

01/2024
KNX BASIC KNX Association

Design, commision, diagnose smart home and building automation solutions based on KNX

02/2023 Rome, Italy
ECOSTRUXURE POWER MONITORING EXPERT Schneider Electric

10/2021
MASTER'S DEGREE IN ENERGY ENGINEERING Sapienza University of Rome

28/04/2020 Rome, Italy
PROGETTAZIONE DI UN IMPIANTO DI CABLAGGIO STRUTTURATO PER GLI EDIFICI COMMERCIALI Schneider Electric

21/04/2020 Rome, Italy
LA TECNOLOGIA BUS PER IL CONTROLLO DEGLI EDIFICI Schneider Electric

2012 – 2016 Rome , Italy
BACHELOR'S DEGREE IN ENERGY ENGINEERING Sapienza University of Rome

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Microsoft Office | C/C++ for Microcontrollers | Python language | KNX ETS6 | AutoCad 2D -3D | 3D Modeling: Fusion 360 | BIM modeling: Revit | Bim design: Edificius, Termus, Solaris, Primus

PROJECTS

05/2024 – 10/2024
SCADA for distributed power monitoring

Development of an open-source platform that manages IoT devices data coming from a distributed residential monitoring of power systems and allowing sharing of anonimous data with other research institutions

09/2023 – CURRENT
Digital Twin for experimental microgrid

Development of a smart platform able to manage the experimental microgrid S.A.P.I.E.N.T.E. of reaseach center "ENEA Casaccia" using the "Digital Twin" technology to implement demand side management and demand response strategies.

02/2023 – 01/2024
Technical consultant for BACS development of hotel's HVAC system

Development of a Building Automation System able to manage the hotel HVAC system and rooms HVAC of "Rome Cavalieri, a Waldorf Astoria Hotel", including techincal inspections, project development and implementation of technical documents.

04/2023 – 10/2023
Feasibility study of an industrial smart city

Feasibility study of an industrial smart city located in Saudi Arabia with the collaboration of "Technip Energies". In particular, an estimation of electricity consumption and PV production of a residential district based on available area, number and type of residents

01/2023 – 07/2023
Technical consultant for research center ENEA Casaccia

Technical advice and feasibility study for the implementation of automation logics able to manage energy and power flows inside the experimental microgrid S.A.P.I.E.N.T.E. of research center "ENEA Casaccia".

11/2022 – 01/2023
SCADA development for Sapienza - DIAEE deparment

Design and development of a SCADA open-source platform for LAMBDA laboratory of DIAEE department. The goal is to monitor and manage energy of the pre-existing microgrid. Custom dashboards have been developed and differentiated according to user's privileges. Also secure communication protocols and creation of users with different privileges have been finalized.

Technical manager of Energy Holter platform

Maintenance and management of the Energy Holter commercial building energy monitoring platform, including system integration activities, adding new systems, and data analysis

PUBLICATIONS

Energy Mobile Hub (EMH) for Optimizing Distribution Grid and Disaster Recovery in Emergency

Electric Vehicles Charging Stations Sharing Model Control

Electrical Systems for Public Lighting with High Energy Efficiency and High Technological Content

Write here the description...

CONFERENCES AND SEMINARS

06/2024 Rome
IEEE EEEIC 2024

Organization member and technical contact.

05/2024 Las Vegas
IEEE I&CPS 2024

Paper author

11/2023 Nashville
IEEE IAS Annual Meeting

Paper author

10/2023 Rome
AEIT International Annual Conference

Organization member and technical contact.

06/2023 Madrid
IEEE EEEIC 2023

Organizaion member, paper author and technical contact

10/2022 Detroit
IEEE IAS Annual Meeting

Paper author

06/2022 Prague
IEEE EEEIC 2022

Organizaion member and technical contact

05/2022 Las Vegas
IEEE ICPS 2022

Paper author

10/2021
"IEEE EEEIC 2021

Paper author