



Roberto Menichelli

Home : Italy

Phone: [REDACTED]

Date of birth: [REDACTED] Nationality: Italian

ABOUT ME

I am a PhD student in Engineering and Applied Science for Energy and Industry with a great desire to learn and challenge myself. I like to approach each task with commitment and attention to detail, always striving to improve and work efficiently.

WORK EXPERIENCE

Sapienza - Laboratorio di Impianti Elettrici, Microreti e Building Automation (LAMBDA)

City: Roma | Country: Italy

[01/06/2022 – 17/10/2024] **Trainee**

- Research support activities in the field of utilization systems, storage systems and BMS, home and building automation;
- experimental activities in BIM modeling and integration with supervisory and monitoring SCADA systems;
- development of algorithms for sizing and management of storage systems;
- development and refinement in open-source environments of automated algorithms for the management of technical systems in the laboratory.

Sapienza - Università di Roma

City: Roma | Country: Italy

[01/10/2024 – 01/12/2024] **Tutor of the MSc Course Microgrids/Power System in Smart Buildings**

Sapienza - Università di Roma

City: Roma | Country: Italy

[28/03/2025 – 30/06/2025] **Tutor of the MSc Course Impianti Elettrici di Utilizzazione e Microreti Sostenibili e Intelligenti**

EDUCATION AND TRAINING

[01/09/2017 – 21/07/2022] **Bachelor Degree in Electrical Engineering**

Sapienza - Università di Roma www.uniroma1.it

City: Roma | Country: Italy |

[01/09/2022 – 17/10/2024] **Master Degree in Electrical Engineering**

Sapienza - Università di Roma www.uniroma1.it

City: Roma | Country: Italy |

[01/11/2024 – Current] **PhD Student in Engineering and Applied Science for Energy and Industry**

Sapienza - Università di Roma https://phd.uniroma1.it/web/ROBERTO-MENICHELLI_nP1808396_IT.aspx

City: Rome | Country: Italy | | **Level in EQF:** EQF level 8

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Spanish

LISTENING A2 READING A2 WRITING A2

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

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

SKILLS

Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access | Web Technologies Fundamentals - HTML, CSS | Javascript | Python | YAML | C++ | Arduino | Inventor | AutoCAD | ETS | OpenDSS | Fusion360 | SCADA | Advanced ACCA Edificius knowledge | usBIM | MATLAB/simulink | DALI Technology | Industrial protocols (Modbus RTU and TCP) | ETAP power system analysis

PUBLICATIONS

[2024] [Lithium Battery Storage Degradation Analysis in LVAC Microgrid](#)

Reference: R. Loggia, A. Flamini, A. Galasso, A. Massaccesi, R. Menichelli and L. Martirano, 2024 IEEE/ I&CPS Europe, Rome, Italy, 2024, pp. 1-6, doi: 10.1109/IEEEIC/ICPEurope61470.2024.10751142.

[2024] [Energy Mobile Hub \(EMH\) for Optimizing Distribution Grid and Disaster Recovery in Emergency](#)

Reference: R. Loggia, R. Menichelli et al., 2024 IEEE International Humanitarian Technologies Conference (IHTC), Bari, Italy, 2024, pp. 1-6, doi: 10.1109/IHTC61819.2024.10855124.

[2024] [Impact of Building Automation, Controls and Building Management on the Energy Performance of Buildings](#)

Reference: R. Loggia, A. Flamini, A. Galasso, R. Menichelli, C. Moscatiello and L. Martirano, 2024 IEEE Industry Applications Society Annual Meeting (IAS), Phoenix, AZ, USA, 2024, pp. 1-8, doi: 10.1109/IAS55788.2024.11023817.

[2024] [Digital Twin of a LV Microgrid with PV and Storage Based on an Open Source Monitoring System and BIM Model](#)

Reference: R. Loggia, R. Menichelli et al., 2024 IEEE Industry Applications Society Annual Meeting (IAS), Phoenix, AZ, USA, 2024, pp. 1-9, doi: 10.1109/IAS55788.2024.11023741.

[2025] [A Monitoring Platform Tool for Energy Communities Optimization and AI Applications](#)

Reference: R. Loggia, R. Menichelli et al., 2025 IEEE/IAS 61st Industrial and Commercial Power Systems Technical Conference (I&CPS), Montreal, QC, Canada, 2025, pp. 1-6, doi: 10.1109/ICPS64254.2025.11030342.

[2025] [BIM and Digital Twin in Smart Electrical Power System: an Innovative Standard Classification](#)

Reference: A. Flamini, R. Menichelli et al., 2025 IEEE/IAS 61st Industrial and Commercial Power Systems Technical Conference (I&CPS), Montreal, QC, Canada, 2025, pp. 1-7, doi: 10.1109/ICPS64254.2025.11030384.

[2025] [A Case Study of a Microgrid for a Nearly Zero-Energy Refurbished Isolated House](#)

Reference: A. Massaccesi, R. Menichelli et al., 2025 IEEE/IAS 61st Industrial and Commercial Power Systems Technical Conference (I&CPS), Montreal, QC, Canada, 2025, pp. 1-7, doi: 10.1109/ICPS64254.2025.11030351.

[2025] [Innovative IFC classification in BIM models ready to be converted into Digital Twins](#)

Reference: A. Galasso, R. Menichelli et al., 2025 IEEE/IAS 61st Industrial and Commercial Power Systems Technical Conference (I&CPS), Montreal, QC, Canada, 2025, pp. 1-7, doi: 10.1109/ICPS64254.2025.11030373.

CONFERENCES AND SEMINARS

- [16/04/2024 – 18/04/2024] **Local Staff IEC Conference Rome 2024** Rome, Italy
- [18/06/2024 – 21/06/2024] **Local Organizing Committee IEEE EEEIC Rome 2024** Rome, Italy
- [10/05/2025 – 15/05/2025] **IEEE I&CPS Montreal 2025** Montreal, Canada
- [15/07/2025 – 18/07/2025] **Local Organizing Committee IEEE EEEIC Chania 2025** Chania, Crete, Greece

ATTESTATI E CERTIFICAZIONI

- [01/04/2024 – Current] **Partner KNX**
- [01/05/2024 – Current] **IEEE student member**
- [21/06/2024] **EEEIC Certificate of Merit for the Poster: Lithium Battery Storage Degradation Analysis in LVAC Microgrid**
- [31/03/2025] **Schneider Electric - Technical Training: MV Relé Programming, PowerLogic P3 and P5**