europass

Giovanni Pettorru

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Gender: Male | **Date of birth**: Jan 22 1997 | **Nationality**: Italy

WORK EXPERIENCE

[07/2021 - 01/2023]

NETWORK ENGINEER AND SOFTWARE DEVELOPER

Università degli studi di CAGLIARI - CAGLIARI (CA) Italy

Company sector: Engineering and design

Business or sector: computer science, data processing and acquisition

Main activities and responsibilities: Support development of data acquisition algorithms on wireless networks and design of monitoring system for alerting in the presence of critical situations in urban environment

EDUCATION AND TRAINING

[2022 - 2025]

ELECTRONIC AND COMPUTER ENGINEERING

Università degli Studi di CAGLIARI

Town: CAGLIARI

EQF level: 8

NQF level: Doctor of Philosophy (Ph.D.)

[2020 - 2022]

ENGINEERING OF INTERNET TECHNOLOGIES

Università degli Studi di CAGLIARI

Town: CAGLIARI

2nd level degree in Telecommunications engineering

Final degree mark: 110/110 cum laude

EQF level: 7

NQF level: 2nd cycle degree/Master of Science (2 years)

Dissertation/thesis title: Secure and low-latency communications based on Websocket over QUIC in Internet of Things scenarios

[2016 - 2020]

ELECTRICAL, ELECTRONIC AND COMPUTER ENGINEERING

Università degli Studi di CAGLIARI

Town: CAGLIARI

1st level degree in Information technology

Final degree mark: 96/110

EQF level: 6

NQF level: 1st cycle degree/Bachelor (3 years)

Dissertation/thesis title: Implementation of a Magnetometer based Vehicle Detection System for Smart Parking applications

OTHER POSTGRADUATE STUDIES

[2023 - 2023]

CERTIFICATO DI PARTECIPAZIONE

Corso di formazione in progettazione europea

Intellera Consulting S.p.a.

Description:

The course provides knowledge and skills on directly managed European funds 2021-2027, focusing on methodologies and techniques for writing, developing and managing a project proposal to be submitted in response to a European call for proposals.

[2020 - 2020]

STUDENT GRANT

Duration: 6 months

Educational Project 'M2M Comm- M2M Communication Standards in Smartcities Environment.'

Università degli Studi di CAGLIARI
Description:

The activities of the fellows, in accordance with the Training Project 'M2M Comm- Standards of M2M Communication in Smartcities Environment,' were divided over three modules, totaling 70 hours of training on:
- Architectures and Protocols for the Internet of Things (IoT);
- Protocols for Short-Range Communication;
- Systems for deployment and management of Smart Cities applications,
Finally, three months of mentorship with staff engaged in research and development activities.

PRE-UNIVERSITY STUDIES

[2016] **Secondary school diploma**: Vocational School, Economics sector, Administration, Finance and Marketing specialisation, Business information systems focus
Italian secondary school diploma

LANGUAGE SKILLS

Other language(s)

English
LISTENING: B2 **READING:** B2 **WRITING:** B2
SPOKEN INTERACTION: B2 **SPOKEN PRODUCTION:** B2

Diploma(s) or certificate(s)
English: Certificato di conoscenza Inglese B2 - Progetto CLA Cagliari - Università di Cagliari, 11 02 2022 - European level: B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference for Languages

ACADEMIC STUDIES IN FOREIGN COUNTRIES

Other experience acknowledged by the course of study
Visiting Ph.D. Student
Language: English
Duration of studies in months: 6
Foreign country where the academic studies were carried out: Viana do Castelo (Portugal)

DIGITAL COMPETENCES

SELF-ASSESSMENT				
INFORMATION AND DATA LITERACY	COMMUNICATION AND COLLABORATION	DIGITAL CONTENT CREATION	SAFETY	PROBLEM SOLVING
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital competences - Self-assessment grid

Basic digital competence:

OFFICE AUTOMATION
Office Suite: (Advanced) | **Presentation Software:** (Advanced) | **Spreadsheets:** (Advanced) | **Word Processors:** (Advanced)

APPLICATION SOFTWARE
Data Visualization: MATLAB (Foundation)

COMPUTER PROGRAMMING
Markup languages: HTML (Intermediate) | **Programming languages:** Assembly (Foundation) , C (Advanced) , C++ (Foundation) , Go (Foundation) , Java (Foundation) , JavaScript (Foundation) , Python (Advanced) | **Web Programming:** PHP (Foundation)

SYSTEMS AND NETWORKS MANAGEMENT
Network architecture: (Intermediate) | **Operating systems:** (Intermediate)

DATA MANAGEMENT
DBMS: (Intermediate)

GRAPHICS AND MULTIMEDIA
(Foundation)

DRIVING LICENCE

Driving licence category B

PUBLICATIONS

Conference proceedings

"Obfuscating Sensor-Based Activity Recognition in eHealth Applications: Is Encryption Enough Secure?" ; Francesca Marcello; Giovanni Pettorru; Marco Martalò; Virginia Pilloni ; International Conference on Communications ; IEEE (2024)
ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=10623045

Journal articles

"A Cross-Layer Survey on Secure and Low-Latency Communications in Next-Generation IoT" ; Marco Martalò, Giovanni Pettorru, and Luigi Atzori ; Transactions on Network and Service Management ; IEEE (2024)
ieeexplore.ieee.org/abstract/document/10504601

"Trustworthy Localization in IoT Networks: A Survey of Localization Techniques, Threats, and Mitigation" ; Giovanni Pettorru, Virginia Pilloni, and Marco Martalò ; Sensors ; MDPI (2024)
www.mdpi.com/1424-8220/24/7/2214

Conference proceedings

"QUIC and WebSocket for Secure and Low-Latency IoT Communications: an Experimental Analysis" ; Giovanni Pettorru, and Marco Martalò ; International Conference on Communications ; IEEE (2023)
ieeexplore.ieee.org/document/10279305

"Using Artificial Intelligence and IoT Solution for Forest Fire Prevention" ; Giovanni Pettorru, Mauro Fadda, Roberto Girau, Mariella Sole, Matteo Anedda, Daniele Giusto ; ICNC 2023 ; IEEE (2023)
ieeexplore.ieee.org/document/10074289

"A Hybrid WiFi/Bluetooth RSS Dataset with Application to Multilateration-Based Localization" ; G. Pettorru, V. Pilloni, and M. Martalò ; MeditCom 2023 ; IEEE (2023)
ieeexplore.ieee.org/abstract/document/10266625

"An IoT-based electronic sniffing for forest fire detection" ; Giovanni Pettorru, Mauro Fadda, Roberto Girau, Matteo Anedda, Daniele Giusto ; ICCE 2023 ; IEEE (2023)
ieeexplore.ieee.org/document/10043411

"Pedestrian and vehicular tracking based on Wi-Fi sniffing: a real-world case study" ; M. Bertolusso, G. Pettorru, M. Spanu, M. Fadda, M. Sole, M. Farina, M. Anedda, D. D. Giusto ; FITCE 2022 ; IEEE (2022)
ieeexplore.ieee.org/document/9934777

"A passive Wi-Fi based monitoring system for urban flows detection" ; Marco Bertolusso, Giovanni Pettorru, Michele Spanu, Mauro Fadda, Mariella Sole, Matteo Anedda, Daniele D. Giusto. ; IAICT 2022 ; IEEE (2022)
ieeexplore.ieee.org/document/9887478

"A Machine Learning-based Approach for Vehicular Tracking in Low Power Wide Area Networks" ; Marco Bertolusso, Michele Spanu, Giovanni Pettorru, Matteo Anedda, Mauro Fadda, Roberto Girau, Massimo Farina, Daniele D. Giusto ; BMSB 2022 ; IEEE (2022)
ieeexplore.ieee.org/document/9828755

"Implementation of a Multisensors Fire-Fighting Monitoring System for Forest Protection" ; Giovanni Pettorru, Marco Bertolusso, Michele Spanu, Mariella Sole, Matteo Anedda, Daniele Giusto ; CSCI 2023 ; IEEE (2022)
ieeexplore.ieee.org/abstract/document/10216586

"Implementation of a Magnetometer based Vehicle Detection System for Smart Parking applications" ; Alessandro Floris, Roberto Girau, Simone Porcu, Luigi Atzori, Giovanni Pettorru ; IEEE (2020)
ieeexplore.ieee.org/document/9239005