

## PERSONAL INFORMATION

## Giuseppe Filippone



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Sex Male | Date of birth 18/04/1994 | Nationality Italian

## WORK EXPERIENCE

May 2019–Jun 2019

## Software developer

SECURPROJECT.UT S.R.L.  
Via Catania, 5, 90141 Palermo (Italy)  
<https://qvince.com/>

I was a trainee at SecurProject between May and June 2019. In this period I worked on:

- Develop an automatic data migration system, from an old platform to a new one, using NodeRED;
- Develop an automatic badging system using IoT components, and MQTT and RFC communication.

Business or sector Business services, consulting

Feb 2017–Mar 2017

## Software developer

PUSH. S.R.L.  
Piazza Sant'Anna, 3, 90133 Palermo (Italy)  
<https://www.wepush.org/>

I was a trainee at PUSH between February and March 2017. During this time I developed a javascript game using the PIXI framework.

Business or sector Education, Training, Research and Development

Nov 2013–May 2014

## Software developer

Or.com S.R.L.  
Via Giovanni Bonanno, 122, 90123 Palermo (Italy)

I worked from July 2013 to May 2014 at Or.com S.r.l as Software Developer.  
Main tasks at Or.com:

- Software development and web sites
- CMS owner development
- Logistics portal development with Liferay 5.2.3
- Development of a system for displaying information through digital displays (PIC'S Pannello Informativo Continuo Scuola)

Business or sector Services for public entities, IT services, consulting

## EDUCATION AND TRAINING

Sep 2018–Feb 2019

## Master's Degree in Computer Science

EQF level 7

Université Paris-Est Marne-la-Vallée  
5 boulevard Descartes - Champs-sur-Marne - 77454 Marne-la-Vallée Cedex 2, 77454  
Parigi (France)  
<http://www.u-pem.fr/>

Agreement that allows students to carry out part of their university career at the University of Palermo and a part at the Université Paris-Est Marne-la-Vallée, obtaining at the end of the course the release of the double title of Master's Degree in Computer Science from the University of Palermo and the Master of Informatique from the Paris-Est University Marne-la-Vallée.

**Main subjects:**

- J2EE
- Android
- Technologies réseau pour l'Internet des Objets
- Routage et transport de données
- Réseaux sans fil systèmes communicants
- Modélisation des réseaux contraints
- Transactions Web et technologie Rest

Oct 2017–Oct 2019

**Master's Degree in Computer Science**

EQF level 7

Università degli Studi di PALERMO - Scuola delle Scienze di Base e Applicate  
Via archirafi, 34, 90123 PALERMO (Italy)  
<http://www.unipa.it/dipartimenti/matematicaeinformatica/cds/informatica2010>

**Thesis title:** Elliptic curves in the Edwards form and applications in the world of Blockchain.

**Supervisor:** Prof. Falcone Giovanni

**Age at the time of graduation:** 25

**Official duration:** 2 years

**Graduation grade:** 110/110 cum laude

**Main subjects:**

- Bioinformatics
- Code theory and Cryptography
- Cyber security
- Artificial Intelligence and Deep Learning
- Information theory and Data compression
- Big Data Management
- JEE
- Advanced methods for programming

Sep 2014–18 Oct 2017

**Bachelor's Degree in Computer Science**

EQF level 6

Università degli Studi di PALERMO - Scuola delle Scienze di Base e Applicate  
Via Archirafi, 34, 90123 PALERMO (Italy)  
<http://www.unipa.it/dipartimenti/matematicaeinformatica/cds/informatica2086>

**Thesis title:** PageRank: theory, algorithm and simulations.

**Supervisor:** Prof. Toscano Elena

**Age at the time of graduation:** 23

**Official duration:** 3 years

**Graduation grade:** 110/110 cum laude

**Main subjects:**

- Abstracted data structures
- Operating systems

- Theoretical computer science
- Database
- Numeric analysis
- Software engineering
- Digital images analysis
- Compilers
- Computer networks

## PERSONAL SKILLS

Mother tongue(s) Italian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B2	B1	B1	B1
French	A2	A2	A2	A2	A2

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

Communication skills

I developed good communication skills during my university teaching path by working together with other colleagues. I have also improved these skills during my curricular internships during my university career.

Organisational / managerial skills

I developed good organizational and managerial skills during my university career. I can organize myself autonomously and manage my time in the best way to complete all the tasks assigned to me.

Job-related skills

Autonomy: 8/10  
Self-confidence: 8/10  
Flexibility / Adaptability: 8/10  
Stress resistance: 9/10  
Ability to plan and organize: 9/10  
Accuracy / attention to detail: 9/10  
To learn continuously: 9/10  
Achievement of objectives: 9/10  
Information management: 8/10  
Entrepreneurial spirit and initiative: 8/10  
Communication: 9/10  
Problem Solving: 9/10  
Team's work: 9/10  
Leadership: 8/10

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Independent user	Proficient user	Independent user	Proficient user

Digital skills - Self-assessment grid

**Operating systems:** Good  
**Programming languages:** Good  
**Word processing:** Good  
**Electronic spreadsheet:** Good  
**Database administration:** Good

**Internet skills:** *Good*

**Data transmission networks:** *Good*

**Website creation:** *Good*

**Multimedia:** *Good*

**Known programming languages:** Python 3.6.X, Micropython, C, Arduino, LaTeX, JAVA 7-8, MATLAB 2017-2019, C++, PHP 4.4/5, Javascript 5/6, CSS 2/3, HTML 4/5, Neuron, Markdown

**Used frameworks and softwares:** Tensorflow 2, NodeRED, Apache Spark, DBeaver, MySQL Workbench 6.3, Astah Professional, EasyPHP, Wireshark, Anaconda 3, Arduino, TeXstudio, Neuron, Postman, SOAP UI, Oracle VM VirtualBox, VMware Workstation, PuTTY, Jupyter Notebook, Typora, Filezilla, Notepad++, Code::Blocks, Eclipse IDE, WinSCP, Spyder IDE

Driving licence B

## ADDITIONAL INFORMATION

### Projects

University projects:

- **J2EE - Android:** Combined project between the J2EE course and the Android course. The project involved the building of a REST server in Java and an interaction via an Android interface. A system was therefore designed for evaluating monuments, hotels and restaurants. Open Data from French sources have been processed;
- **Technologies réseau pour l'Internet des Objets:** Design of a system of IoT devices, connected via WiFi Ad Hoc, for the automatic detection of traffic and notification of interesting events nearby;
- **Transactions Web et technologie Rest:** Design of a system for buying and selling cars through SOAP and REST web services using the Java Standard Edition. The project involved the provision of services for the evaluation and rental of cars (at a favorable price) for the employees of a company, and the subsequent sale of only the rented cars;
- **Big data management:** Design of a Data Warehouse for restaurants data analysis. Implementation of Google's Pagerank algorithm using the Map-Reduce paradigm through PySpark (Python implementation of the Apache Spark framework);
- **Cyber security:** Design of a software for encrypting files on disk, robust to the change of file path;
- **JEE:** Design of a software in Java Server Face using Agile Scrum approach for the management of virtualized tourist villages with the following features: a village registration system, search for a village, integrated review system with Facebook and Twitter. The system also allows the execution of the same procedures through REST services with JWT authentication;
- **Information theory and Data compression:** Design of a software for the interaction and comparison of different data compression algorithms. The software includes a backend realized in Python and a frontend realized in Python with the aid of Django;
- **Deep learning:** Design of a recurrent network (in particular, with an LSTM network), through supervised learning, able to recognize a cardiac anomaly in an electrocardiogram;
- **Software engineering:** I created a software project (with the documentation) following the principles of Software Engineering. The project included a system for managing employees within a school. Scheduling of activities, requirements research, system architecture and software design were carried out, as well as the realization of UML diagrams (classes diagrams, activities diagrams, use cases diagrams, etc...) for the description of the project;
- **Computer networks:** The project involved interfacing between IoT devices and network technologies. In particular, an IoT system was created for opening a door by reading RFID cards and communicating with a server using micropython sockets. A python server has been created for interfacing with the IoT device. As an IoT device, an ESP8266 was used and programmed with micropython. Servo motors, buzzers and LEDs have also been used for luminous and sound signaling of card acceptance/rejection.

### Courses

Main subjects for Bachelor's Degree and Master's Degree:

- Abstracted data structures
- Advanced methods for programming

- Algorithm science and engineering
- Artificial intelligence and Deep Learning
- Basic programming in Android
- Basic programming in C++
- Big Data management
- Bioinformatics
- Coding theory and cryptography
- Compilers
- Computer networks
- Cybersecurity
- Database
- Image analysis
- Information theory and data compression
- Network modeling with constraints
- Network technologies for the Internet of things
- Numerical analysis
- Operating systems
- Programming languages
- Python and scripts languages
- Routing protocols and Ad Hoc WiFi networks
- Software engineering
- Theoretical Computer Science
- Web transactions and REST technologies
- Wireless networks and IoT protocols

**Personal data**

I hereby authorize the processing of the personal data contained in this CV in compliance with the European Regulation (UE) 2016/679.