

## Curriculum Vitae

Roberto Calogero Smiriglia

<https://github.com/rcsm17>TITLE OF QUALIFICATION  
AWARDED**Degree in Computer Science**

## WORK EXPERIENCE

02/08/2018–Present

**FullStack Developer and SysAdmin**

Institute of biophysics - CNR

Via Ugo La Malfa, 153, 90146 Palermo (Italy)

<http://www.pa.ibf.cnr.it/>

- Development of web application in Django (Python)
- Development of RestAPI services in DRF (DjangoRestFramework)
- Setup and management of server machines that runs Linux
- Setup and management of virtual machines hosted by **CINECA** using the OpenStack platform
- Setup and management of databases using Postgres as DBMS in production web applications
- HPC System knowledge for **CSCS** and **CINECA**
- Integration of services and web applications within the **HumanBrainProject** and **Ebrains** platforms
- Developed the *ServiceAccount*, a RestAPI service used to submit jobs on the HPC for users who not have an account on the HPC system <https://humanbrainproject.github.io/hbp-bsp-service-account/> (docs) and <https://github.com/HumanBrainProject/hbp-bsp-service-account/> (source-code)
- Developed the *HPC-Monitor* web application <https://bspmonitors.cineca.it/>, <https://github.com/cnr-ibf-pa/hbp-monitors/> (source-code)
- Improved and UI restylish of the *Hodgkin-Huxley NeuronBuilder* web application <https://hbp-bsp-hhb.cineca.it/>, <https://github.com/cnr-ibf-pa/hbp-bsp-hh-neuron-builder/> (source-code)
- Participation in events abroad

**Business or sector** Software development for the Brain Simulation Platform of the Human Brain Project

• 01/04/2018–31/07/2018

**Stage**

Institute of biophysics - CNR

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<http://www.pa.ibf.cnr.it/>

- Development of tools and services in the neuroscientific field
- Development of web user interfaces
- Development of backend modules
- Implementation of communication infrastructures
- Implementation of RestAPI
- Integration of data and electrophysiological traces

**Business or sector** Software development for the Brain Simulation Platform of the Human Brain Project

01/10/2014–30/03/2016

### **Android developer**

Push

Piazza Sant'Anna, 3, 90133 Palermo (Italy)

<https://www.wepush.org>

- Implementation and integration of modules for the TrafficO2 android mobile application
- Development of Palermo UTC android mobile application
- Development of Fodie Challenge android mobile game
- Computer assistant for Linux/Unix based systems

**Business or sector** Research and Development - ICT

06/2009–09/2009

### **Computer assistant**

- Installation, updating and customization of operating systems
- Formatting and partitioning of storage disks
- Virus, trojan, malware and spyware cleaning
- Partition table, file systems and erased files restoring
- Pc assembling
- Pc and laptop hardware maintenance
- Home assistance

EDUCATION AND TRAINING

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11/2010–03/2018

**Degree in Computer Science**

University of Palermo, department of Mathematics and Computer Science  
Via Archirafi, 34, 90123 Palermo (Italy)  
<https://www.cs.unipa.it>

Thesis title

**Deep learning networks for the identification of cutaneous melanoma**

Date of degree

08/03/2018

Score

93/110

Main subject of study

- Mathematical analysis
- Physics
- Geometry
- Numerical analysis
- Programming
- Algorithms and data structures
- Operating systems
- Computer networks
- Processing systems
- Data bases
- Compilers
- Images analysis

Main programming languages  
used

- C
- SQL
- MatLab
- Flex e Bison
- HTML
- Css
- Javascript

2005–2010

**Scientific High School Diploma**

Lucio Piccolo Institute  
Via Consolare Antica, 98071 Capo d'Orlando (Italy)

Main subject of study

- Math
- Physics
- Science
- Italian
- Latin

## PERSONAL SKILLS

Mother tongue	Italian				
Foreign language(s) Self assessment	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

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** Good communication skills gained through schools and academical experiences and enhanced through international trips and works experiences.

**Organisational / managerial skills** Good organization skills and workload management

**Programming languages and framework known**

- C
- Java
- Android SDK
- Python
- TensorFlow
- Django
- DRF (Django Rest Framework)
- HTML
- Xml
- Css
- Javascript
- Rest API
- MatLab
- Flex
- Bison
- SQL
- PostgreSQL
- Libgdx
- Bash
- Assembly (x86)

**Job-related skills**

- Great skills for problem solvig improved with the working experiences
- Excellent predisposition to learn and use new technologies or programming languages
- Good knowledge of architectures and the implementation of simple, deep and convolucional artificial neural network.
- Advanced knowledge of Django for web application (backend and frontend) development.
- Advanced knowledge of web user interface development technologies: HTML, CSS, JAVASCRIPT.
- Good Rest API implementation skills.
- Good knowledge of Android mobile development techniques.
- Good knowledge of game loop to develop mobile games.
- Good knowledge of remote communicative solution development.
- Good knowledge of relational database such as SQL, SQLite, Postgres etc..
- Good knowledge of parser and lexical analyser generators Flex and Bison.
- Advanced knowledge of multithreading and multiprocessing programming.
- Advanced knowledge of network protocols and client-server services.
- Advanced knowledge of the Linux/Unix operating systems and their maintenance, Bash shell, user privileges, system services, kernel customization, network security using iptables and other firewalls.
- Good knowledge of the Windows operating systems, with good use of Cmd and Powershell, customization and maintenance of the system.
- Advanced knowledge of virtual machine environments like VirtualBox, Qemu-KVM etc... and their maintenance.
- Good knowledge of systems and networks security protocol.

## Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
PROFICIENT USER	PROFICIENT USER	PROFICIENT USER	PROFICIENT USER	INDEPENDENT USER

Digital skills - Self-assessment grid