



Federico Gianni

COMPUTER ENGINEER · SOFTWARE & DATA SCIENCE EXPERT

DoB: 12/09/95

☎ (+39) 3496087065 | ✉ giannofederico@gmail.com | 🏠 j4nn0.github.io | 📺 J4NN0 | 🌐 gianno-federico

M.Sc. student in Computer Software Engineering at Politecnico di Torino. Passionate about Optimization Methods and Algorithms, Machine Learning, Deep Learning, Big Data and Data Science. Oriented toward challenges that require strong problem solving skills. Always improving soft skills and teamwork attitude.

Experience

Tutor

COMPUTER TECHNOLOGY AND MATHS

- Provided private lessons, regarding maths and computer technology, to high school students.

Turin, Piedmont

Jan 2016 - PRESENT

Competitive swimmer

GEMINI & CNT (CENTRO NUOTO TORINO)

- Regional champion undefeated for 5 years.
- Five national finals and participated twice in international finals.

Syracuse, Sicily & Turin, Piedmont

Sept 2009 - Apr 2015

Education

Liceo Superiore "Ettore Majorana"

HIGH SCHOOL DIPLOMA

- Scientific high school diploma, 93/100

Noto (SR), Sicily

2009 - 2014

Politecnico di Torino

BACHELOR OF ENGINEERING - BE

- Computer Engineering

Turin, Piedmont

2014 - 2017

Politecnico di Torino

MASTER'S DEGREE

- Computer Software Engineering

Turin, Piedmont

2017 - Exp. 2019

Skills

Domain Knowledge	Machine Learning, Deep Learning, Cryptography, Operating System, Multithread Programming
Programming languages	C, C++, C#, Python, Java, Bash, AWK, Assembly 8086, ARM, Matlab, SQL, JS, PHP, HTML, CSS
Libraries & Frameworks	NumPy, PyTorch, Scikit-learn, Matplotlib, Pillow
Tools	Git, Docker, PyCharm, CLion, PHPStorm, IntelliJ IDEA, Eclipse, XAMP, Trello, Visual Studio, Android Studio
Languages	Italian (<i>Mother-tongue</i>), English (<i>B2, Level attested by IELTS Certificate - British Council</i>), French (<i>A2</i>)

Notable Projects

Machine Learning

ACADEMIC PROJECT

- PCA: application of PCA applied on images. It shows what happens if different Principal Components are chosen as basis for images representation and classification. Then a classifier will be chosen and applied in order to classify the images under different PC re-projection.
- SVM: the purpose is to plot data item as a point in n-dimensional space with the value of each feature being the value of a particular coordinate. Then, perform classification by finding the hyper-plane that differentiate the two classes.
- Deep Learning: implementation of a Convolutional Neural Network on a big image data-set. The code implements a basic NN and CNN, the data loading, the training phase and the evaluation (testing) phase. The training and testing are on CIFAR 100 data-set.

GitHub

Oct 2018 - Jan 2019

ETS - ESP32 Tracking system

PROJECT FOR THE "PROGRAMMAZIONE DI SISTEMA" COURSE

- Distributed system to gather, analyze and store data related to triangulation and analysis of mobile devices in buildings.
- The purpose of the project is to sniff probe request packets sent by smart-phones that are looking for a Wi-Fi connection. From each sniffed packet some information will be extracted and elaborated in order to do several analysis.
- After each minute these information are sent to a server and processed. Then is possible to see the processed information (position, time frequency and etc.) through a GUI.

GitHub

Jul 2018 - Oct 2018

Study and design data models for NFV and SDN architectures

Soon on GitHub

SPECIAL PROJECT FOT THE "DISTRIBUTED PROGRAMMING 2" COURSE

Oct 2018 - Mar 2019

- Collaboration with NetGroup PoliTO (Computer Networks Group at Politecnico di Torino).
- Data format (described by means of an XML schema) for the representation of all the most relevant information in the NFV (Network Function Virtualization) and SDN (Software Defined Networking) contexts.
- RESTful web service that permits to store and retrieve the NFV/SDN information.

Extracurricular Activity

Machine Learning Student Group

Turin, Piedmont

MEMBER

Feb. 2019 - PRESENT

- Passionate Machine Learning students of Politecnico di Torino in which ideas and advice are exchanged.
- Gained knowledge in Machine Learning and Deep Learning area.

Hello BOT! - Hackathon

Turin, Piedmont

MU NU CHAPTER OF IEEE - HKN POLITO

11 Nov 2017 - 12 Nov 2017

- Winner of the Hackathon.
- A Python telegram BOT has been developed in 24h with a related presentations exposed to several companies.
- Code available on [GitHub](#).

Reply Code Challenge - Hackathon

Turin, Piedmont

REPLY - 'CODE MASTERS TEAM OF REPLY'

30-31 Mar 2019

- Participation in the Hackathon.
- Find the solution of a logical-mathematical problem in any programming language.

Like@Home - Hackathon

Turin, Piedmont

MU NU CHAPTER OF IEEE - HNK POLITO, SPONSORED BY REPLY

15 Mar 2018

- Winner of the Hackathon.
- The purpose is to develop in 24h an home assistant useful for students.
- Code available on [GitHub](#).

Deep Learning

Turin, Piedmont

UDEMY COURSE

Apr. 2018

- Data Science: Natural Language Processing (NLP) in Python
- Modern Deep Learning in Python
- Deep Learning: Convolutional Neural Networks in Python

Ethical Hacking

Turin, Piedmont

UDEMY COURSE

Mar. 2018

- Learn Ethical Hacking From Scratch
- The Complete Nmap Ethical Hacking Course: Network Security

Honors & Awards

SWIM

2014	Semifinalist , Sette colli - International swimming championship	Rome, Italy
2014	3th Place , Italian swimming championship	Rome, Italy
2014	1st Place , Regional swimming championship	Sicily, Italy
2013	4th Place , Italian swimming championship	Rome, Italy
2013	1st Place , Regional swimming championship	Sicily, Italy
2012	5th Place , Italian swimming championship	Rome, Italy
2012	1st Place , Regional swimming championship	Sicily, Italy
2011	1st Place , Jeux des îles - International swimming championship (Cat. Juniores)	Palermo, Italy
2011	1st Place , Regional swimming championship	Sicily, Italy
2010	1st Place , Regional swimming championship	Sicily, Italy

HACKATHON

2019	1st Place , Like@Home - Mu Nu Chapter of IEEE Hackathon (sponsored by Reply)	Turin, Piedmont
2018	Participant , Reply Code Challenge - Hackathon	Turin, Piedmont
2017	1st Place , Hello BOT - Mu Nu Chapter of IEEE Hackathon	Turin, Piedmont