

Luca Angioloni

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EDUCATION

UNIVERSITY OF FLORENCE

PHD IN SMART COMPUTING

From Nov 2019 | Florence, Italy
College of Engineering

UNIVERSITY OF FLORENCE

MENG IN COMPUTER ENGINEERING

Apr 2019 | Florence, Italy

College of Engineering

Vote: 110/110

Magna Cum Laude

UNIVERSITY OF FLORENCE

BS IN COMPUTER ENGINEERING

Nov 2016 | Florence, Italy

College of Engineering

Vote: 102/110

LINKS

Github:// [LucaAngioloni](#)

LinkedIn:// [Luca Angioloni](#)

Web Site: [lucaangioloni.github.io](#)

SKILLS

PROGRAMMING

Proficient

C/C++ • Python • MATLAB • Java

Javascript • SQL • PHP • \LaTeX

Familiar:

iOS • Android • Swift

AWARDS

2018 | Florence, Italy

Awarded 1st in the **SSE Challenge**

Engineering for Industry 4.0

EXPERIENCE

RESEARCH SCHOLARSHIP

2018 | University of Florence

"Development of **compression and denoising algorithms** for images from AS-OCT". Designed a **custom and efficient** compression and denoising algorithm specifically for AS-OCT images and implemented it.

ARCAMEMORIE

2018 | Florence, Italy

Software Engineer

MAGENTA S.R.L.

2014 | Florence, Italy

Researcher

WORK

AIDIA S.R.L. | CTO & CO-FOUNDER

Jun 2020 - now | Florence, Italy

I design and supervise the development of the technological solutions the company offers, selecting the right tools, frameworks and methods and managing the development engineering team.

My responsibilities and duties include: Company Management, Project management, Technological and Strategic decision making and Team building.

RESEARCH

UNIVERSITY OF FLORENCE | RESEARCHER

May 2019 - Oct 2019 | Florence, Italy

I collaborate with Prof. Paolo Frasconi and Dr. Valentijn Borghuis in the design, training, and evaluation of innovative **generative models** and algorithms to generate music genre interpolations and other forms of **autonomous music production**. The goal of this research project is the application of **Wasserstein autoencoders** to the generation of MIDI musical patterns starting from proprietary data made available by the contractor Borgflocken B.V.

NORTHEASTERN UNIVERSITY - SPIRAL LAB | RESEARCHER

Sep 2018 - Jan 2019 | Boston, MA

Worked with **Machine Learning** and **Signal Processing** on a **DARPA** project called **RFMLS** (Radio Frequency Machine Learning System), in order to identify wireless devices based only on raw RF transmissions with thousands of devices. Designed the **Neural Network Architecture** used for the identification task and helped develop the signal processing system needed to **extract the right features**.

PUBLICATIONS

- [1] L. Angioloni, T. Borghuis, L. Brusci, and P. Frasconi. Conlon: A pseudo-song generator based on a new pianoroll, wasserstein autoencoders, and optimal interpolations. In *Proceedings of the 21st International Society for Music Information Retrieval Conference*, pages 876–883. ISMIR, 2020.
- [2] F. Restuccia, S. D'Oro, A. Al-Shawabka, M. Belgiovine, L. Angioloni, S. Ioannidis, K. Chowdhury, and T. Melodia. Deepradioid: Real-time channel-resilient optimization of deep learning-based radio fingerprinting algorithms. In *Proceedings of the Twentieth ACM International Symposium on Mobile Ad Hoc Networking and Computing*, pages 51–60. ACM, 2019.
- [3] K. Sankhe, M. Belgiovine, F. Zhou, L. Angioloni, F. Restuccia, S. D'Oro, T. Melodia, S. Ioannidis, and K. Chowdhury. No radio left behind: Radio fingerprinting through deep learning of physical-layer hardware impairments. *IEEE Transactions on Cognitive Communications and Networking*, 2019.

PROJECTS

ProteinSecondaryStructure-CNN | MACHINE LEARNING

2018 | Open source Project

Protein Secondary Structure predictor using CNNs (Sequence to sequence).

Github:// [ProteinSecondaryStructure-CNN](#)

Many Others... (See GitHub)