

STEFANO CAPPELLINI

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Date of birth: 10/08/1989 • For the latest version of this resume: http://cppsfn.co/pdfs/cv_stefano_cappellini.pdf

BRIEF DESCRIPTION

I am an Italian *Machine Learning Engineer* and *Deep Learning enthusiast*.

I worked as a Software Engineer and Web Developer freelance from 2011 to 2015.

After I got my degree in Computer Science in 2015, I decided to dive into the Machine Learning world to combine my background with my passion for Maths, Artificial Intelligence, Probability and Statistics.

I got my *Machine Learning Engineer Nanodegree* from Udacity in 2017 and during the last eight months I have mostly focused on Deep Learning: I am a month away from completing the *Udacity Deep Learning Nanodegree* and the *Coursera Deep Learning Specialization*.

I am energetic, positive and passionate. I am looking for interesting and challenging opportunities.

SKILLS

Machine Learning:

- Deep Learning: CNNs, RNNs, GANs.
 - Able to build complex models from scratch using the latest research techniques, to optimize, evaluate and compare their performance and robustness.
 - Knowledge of the most used architectures (Inception, ResNet,...) and concepts (embedding, autoencoders, ...)
- Supervised, Unsupervised, Reinforcement learning, Semi-supervised learning
- Knowledge of the most widely used learning algorithms, ensemble techniques and best practices
- Able to go through the entire Machine Learning workflow, from the data acquisition, data preprocessing up to the models optimization, tuning, validation and selection.
- Python, TensorFlow, Keras, Sklearn, Skimage, Numpy, Pandas, Scipy, Matplotlib, Jupyter Notebook

Artificial Intelligence: Basic knowledge of AI and of Multi-Agent Systems

Data Mining: Able to go through the entire Data Mining cycle. Knowledge of Knime.

Research: Able to search, understand the relevant Literature and to write scientific documents using tools like LaTeX, BibTeX, Zotero

Computer Science:

- *Typical background for a bachelor's degree in Computer Science:* good knowledge of algorithms, theory of computation, optimization, maths, probability, statistics, programming, databases
- Cryptography, Information Theory, computer security
- C++ (< 1 yr), Java (5+ yrs), JavaScript (5+ yrs), Lisp (1 yr), PHP (5+ yrs), Prolog (1 yr), Python (1 yr)
- *Software Engineering:* Object Oriented Analysis/Design/Programming, Git, TDD, UML, Antipatterns, code smells, Design Patterns, refactoring, unit testing, black and white box testing, use cases
- *Web:* PHP, MySQL, JavaScript, CSS, Less, SASS, Grunt, JQuery, HTML

PROJECTS

- **Facial Landmark Detection: a modern approach (2017)** (<http://bit.ly/2xjEmPZ>): To solve the Facial Landmark Detection problem I built a CNN model, with a conceptually simple architecture, employing some recent techniques (Inception modules, residual connections, ...). The solution was cheap to train, obtained competitive computational performance and predictive performance comparable to the ones obtained by more complex, state-of-the-art models presented in the last few years.
- **SASHO (2016)** (<http://cppsfn.co/projects/sasho/>): Php + JavaScript URL shortening service: when a user clicks on a shortened link, a page is opened showing where that link is pointing to, asking for a confirmation. In addition, it uses the MyWOT API to evaluate the links safety.
- **RResize (2015)** (<http://cppsfn.co/projects/rresize/>): JQuery utility that allows to execute the code when a resizing event occurs or when it is over, using throttling to speed up performance
- **MagieSort (2014)** (<http://cppsfn.co/projects/magiesort/>): Java utility that allows to explore, step by step, how various sorting algorithms work.

EDUCATION

02/2018: Deep Learning Nanodegree - Udacity

09/2017: Machine Learning Engineer Nanodegree - Udacity

09/2016: One year of the Computer Science Master Degree at University of Milano-Bicocca

07/2015: Bachelor of Science in Computer Science, cum laude - University of Milano-Bicocca

CERTIFICATIONS

02/2018: Sequence Models - Coursera.

02/2018: Convolutional Neural Networks - Coursera. License [YAB45XKF86CN](#)

12/2017: Structuring Machine Learning Projects - Coursera. License [UWVNPEUF3AJR](#)

11/2017: Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization - Coursera. License [AWNYYU4YK22KH](#)

11/2017: Neural Networks and Deep Learning - Coursera. License [Q733LP5WUJ5S](#)

PROFESSIONAL EXPERIENCE

10/2011 - 10/2015: Full-stack Web developer freelance. I built websites for small business (e.g. PcXpress srl), nonprofit organizations (e.g. Saint Lawrence Foundations)