Marco De Nadai

CONTACT INFORMATION

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EDUCATION

Università degli Studi di Trento, Italy **September 2012 – March 2015**
Computer science - Information processing and data managment
Master's Student, 110L/110, summa cum laude

Vrije Universiteit Amsterdam, The Netherlands **August 2013 – August 2014**
Computer science - Artificial Intelligence
Exchange Master's Student

Università degli Studi di Udine, Italy **October 2007 – March 2012**
Computer science
Undergraduate Student, 100/110

PROFESSIONAL EXPERIENCE

Data scientist
Fondazione Bruno Kessler, Italy **September 2014 - March 2015**

Research assistant on city science from Call Detail Records (CDRs) inside the MoBS group lead by dr. Bruno Lepri.
Languages used: Python

Data Scientist Intern
Telecom Italia, Italy **September 2014 - March 2015**

Responsible of a project named "The life of a city: social-economical trends through mobile phone data traffic analysis" with the aim of describing cities behaviour from CDR data. This project finds activity hotspots and associates socio-economic indexes such as GDP, wages, employment and epidemics, to the population's (mobile) activeness.
Languages used: Python

Machine Learning Intern
University of Amsterdam, Netherlands **April 2014 - August 2014**

Intern on a project about detecting anomalies in the gas consumption of around 20 buildings of Amsterdam. The project involved the construction of an Artificial Neural Network able to predict energy consumption.
Languages used: Python, R

iOS developer
Ulook, Italy **February 2013 - December 2013**

iOS and API developer for Ulook, a fashion mobile application. I developed the app, proposed and applied a new design for a better user experience and optimized it for iOS 7.
Languages used: Objective-C

Lead web develper and Software Engineer
MCZ GROUP S.p.A., Italy **May 2008 – February 2012**

PHP Zend Framework developer with knowledge in IBM AS/400 communication and interaction. Front-end developer experienced in A/B testing and marketing strategies. Developer of geo-marketing solutions aimed to map turnovers of MCZ GROUP's clients. Technologies used: mySQL, jQuery, HTML5, CSS3, git, Nginx, Apache, Linux.
Languages used: PHP, Java, Javascript

AWARDS

Finalist Data Journalism Awards 2014
Global Editors Network **May 2014**

The Data Journalism Awards rewarded "The Westgate attack" **data visualisation** project as an outstanding work in the field of data journalism in any media worldwide.

Best mobile application
Smau 2014 **March 2014**

Ulook was recognized as the best application in the "Community and Social" category by the "Smau Mob App Awards".

Special creativity price
IED, allo StartupWeekEnd 2012 di Torino **June 2012**

Special creativity award from IED (http://www.ied.com) at StartupWeekEnd 2012. The awarded project was "Linked Green", a prototype that enables the user to scan a product's barcorde and see all the information about its package and its eco sustainability.

Personal Projects

Westgate Attack
Master project **2013**

Visualization about the Westgate shopping mall attack case that took place in Nairobi, Kenya, during 21-24 September 2013. This project analyzed around 700'000 Tweets and tried to describe the events throught the users' behaviour. The beta can be found: `http://lstout.github.io/westgate/html/`. *Tools used*: Python, SQLAlchemy, PIL, D3js.

A new massive data analytics approach to football
Master project **2013**

Small framework of tools which enables the coaches to base their new strategies not only on their intuition and judgment, but also on comprehensive (and maybe not human-eye visible) statistics.
The framework is composed by a training clustering (with K-means), a trajectories clustering (TRACLUS), a speed performance analysis and a passages pattern visualization. *Tools used*: Python.

Cartolina
Personal project **2013**

Project composed by an iOS application and relative API system, able to send real physical (paper) postcards from the smart-phone. It allows people to take a picture of a place and send a physical postcard to family and friends. This allows to share real emotions and not pre-built pictures. *Tools used*: Python, Objective-C.

Formal verification OAuth 2.0 protocol
Bachelor project **2010**

Formal verification of the protocol OAuth 2.0 (draft 22) using the automatic cryptographic protocol verifier Proverif (`http://prosecco.gforge.inria.fr/personal/bblanche/proverif/`).

Komixjam.it
Developer - Founder **2006 – 2010**

Brand creation and establishment of a community that counts 30'000 unique visits a day. *Technologies used*: mySQL, Sphinx, CSS, jQuery, Nginx, Linux.

Skills and Background

Advanced knowledge: Java, Objective-C, Python, PHP, Javascript, HTML5, CSS3, SQL
Medium knowledge: C, C++

Certifications

CCNA 1-2
Cisco

IT Administrator 1-3
EUCIP

Languages

- *English:* good (B2 level)
- *Italian:* native

List of courses (University)

Vrije Universiteit Amsterdam, The Netherlands **August 2013 – present**

Computer science - Artificial Intelligence

- Evolutionary Computing *(Evolutionary algorithms, strategies...)*
- Coding and Cryptography
- Knowledge Engeneering
- Distributed System
- Machine Learning *(Supervised/Unsupervised Learning, Neural networks...)*
- Information visualization *(D3js, theory...)*

Università degli studi di Trento, Italy **September 2012 – present**

Computer Science - Information retrival and data managment

- Formal methods
- Economics and Management - Innovation and Enterpreneurship
- Data and information integration *(Information retrieval...)*
- Technical Writing *(how to write papers and scientific documents...)*
- Laboratory of Business Process Management *(Signavio, Business managment...)*
- Advanced Business Intelligence Techniques *(Pagerank, Hadoop...)*
- Massive Data Analytics *(data mining, data structures, pratical data mining projects...)*
- Security Testing *(white/black box testing, web security, penetration tests...)*

Università degli studi di Udine, Italy **October 2007 – March 2012**

Computer Science

- Mathematical Analysis
- Computer Architecture
- Programming
- Physics
- Discrete Mathematics
- Algorithms
- Professional ethics
- Statistics
- Mathematical logic I
- Mathematical logic II
- Objective Oriented Programming
- Scientific Calculus
- Computability I
- Computability II
- Operative Systems
- Databases
- Software Engineering
- Formal Methods I
- Networks
- Network security & Lab.
- Web Design