

# Valerio Lanziani

## Curriculum Vitae

Via della Torre, 11  
Bassano in Teverina, VT 01030  
☎ (+39) 347 112 8343  
✉ [valerio.lanziani@gmail.com](mailto:valerio.lanziani@gmail.com)

## Summary

I achieved my master's degree in computer engineering in 2015, working on a project involving heavy use of non-relational databases for fast and deep searches. In my current works I'm further specializing my NRDBMS knowledge, OO languages and web services.

I'm a curious person that likes to always take new challenges and open to learn new things. I like to put a lot of attention to details and never take compromises, if possible.

## Experience

Nov 2015 **Software Engineer**, INTECS, Rome.

Currently working in the company's defense department, I'm developing an application responsible of the tracking and management of military threats and the definition of appropriate countermeasures. Focusing on both backend and frontend sides, I developed part of the application's interface and domain logic layer, using frameworks like Vaadin and Spring MVC.

Sep 2014 **Software Engineer**, TRANSLATED, Rome.

Working in Translated, I was tasked on the switch from a classic relational database to a NoSQL, graph database, working with technologies like OrientDB and Neo4j. In this work I developed methods of smart imports of large, unorganized data; conceptualized a graph structure for highly customizable searches; developed both APIs and service layer in order to integrate the database to the existing infrastructure; developed a message queuing service for keeping both relational and graph database's data synchronized. All of this work was to help improve the quality of Translated's main product: MateCAT. The most used languages were Java and PHP.

## Academic Experience

### ○ Information Retrieval.

This project consisted in the development of a search engine with a large number of html pages. I created a simple web interface to search and retrieve large sets of previously indexed pages. For this work I used the Apache Lucene framework. This project gave me a good knowledge about search engines and how do they work.

### ○ Big Data.

This work required the processing of large amounts of data using the popular MapReduce programming model. In this project I learned to use the Apache Hadoop framework, Pig, Hive and the AWS platform. It taught me how much optimization and correct sequencing is crucial when managing huge sets of data.

## Education

2015 **Master's Degree in Computer Engineering**, Roma Tre University, Rome.

*Graph-oriented extension on the Translation Memories' model in the translation industry*

The thesis covers the work done to create a graph model that could improve the well established Translation Memory model, with the goal of incrementing the number of results obtainable with the same amount of data. It also explains the efforts made to build a graph database on top of said model containing billions of elements.

2012 **Bachelor's Degree in Computer Engineering**, Roma Tre University, Rome.

*Visualization system of urban public transportation on maps*

## Skills (sorted by experience)

OS Windows, Linux, OSX

Languages Java, PHP, Javascript, Python

Frameworks Apache ActiveMQ, Apache Lucene, Apache Hadoop

Databases OrientDB, Neo4j, MySQL, Redis

## Languages

Italian **Mothertongue**

English **Professional working proficiency**