# Simone Mosciatti

Curriculum

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#### Education

2013-Present Bachelore in Engineering of Computer Systems, Politecnico di Milano, Milan, Italy. As my final project I am currently working on Estimating time to completion of MapReduce jobs. In this work, I leverage MARC, a framework for the estimation of resource consumption, as a mean to provide accurate models for the completion time of MapReduce jobs, executed on a Hadoop cluster. I take into consideration the percentage of job completion as a resource that can be consumed; a piece-wise linear model is then generated subdividing the job execution into different phases, according to configuration parameters and runtime metrics. The proposed model allows the user to have both a better estimate of the time required by an already submitted job to complete and the ability to perform more accurate resource reservations, towards a more efficient scheduling and a higher cluster utilization.

2014–2015 Bachelore in Engineering of Computer Systems, *Tongji University*, Shanghai.

Double Degree Program Politong

### Experience

#### 2013–2014 **Software Engineer, Freelance**, *workinvoice.it*, Milan.

The platform is a marketplace to buy and sell invoices.

Starting from a rough prototype I re-wrote the whole backend code in such a way to be maintainable and scalable, I also added interactivity via JS.

As requested by my costumer the backend is written in Clojure while the frontend uses a more standard HTML5/CSS/JS combination.

- o Build authentication system for different kinds of users.
- Design and implementation of the API
- SQL schema design
- Frontend work

#### 2012–Present **OpenSource Author**.

I am the author of the following projects:

- github.com/siscia/effe Open Source Software to provide the same advantages of AWS Lambda. Introducing Effe
- o github.com/siscia/effe-tool Makes it easy and simple to work with effe
- Introduction to Highly Scalable, Fault Tolerant, Distributed System Tiny introduction to the ideas behind Highly Scalable, Fault Tolerant, Distributed system.
- o github.com/siscia/**numerino** Priority Queue is Elixir/Erlang/OTP
- o github.com/siscia/postgres-type Makes possible the use the JSON datatype in Postgres database with clojure.

#### 2012–Present **OpenSource Contribution**.

Contribution to the following libraries

- o github.com/clj-time/clj-time the standard way to handle time in clojure
- o github.com/budu/**lobos** SQL schema manipulation and migration library for clojure
  - I made possible to use lobos with the last version of the java driver.

## Languages

Italian Mother tongue

English Proficient I was an AFS exchange student in 2011-2012 at Carthage, MO, USA high school.

Chinese Basic

# Programming Skills

Proficient **Clojure**, compojure, monger, korma, core.async.

Proficient Python, Flask, Django.

Proficient Elixir, Erlang/OTP, BEAM VM.

Very Good SQL, PostgreSQL, SQLite3.

Very Good NoSQL, MongoDB.

Very Good Java.

Very Good Go(lang).

Good C/C++.

Good JavaScript, mongoose, node.js.

Basic Haskel.

Basic Rust.