



# Alessio Falai

SOFTWARE DEVELOPER · ARTIFICIAL INTELLIGENCE STUDENT

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## Education

### Alma Mater Studiorum - University of Bologna



M.S. IN ARTIFICIAL INTELLIGENCE · COMPUTER ENGINEERING

Grade -  
Thesis -

Python SKLearn/PyTorch/Keras Prolog Scala Spark MiniZinc/Z3

Bologna, Italy

October 2019 - Now

### Florentina Studiorum Universitas - University of Florence



B.S. IN COMPUTER SCIENCE

Grade 110 cum laude / 110  
Thesis Refinement of a Python library to perform OCR on identity documents

C Java MySQL Python

Florence, Italy

October 2016 - October 2019

### I.T.S. Tullio Buzzi



HIGH-SCHOOL DIPLOMA IN INFORMATION AND COMMUNICATIONS TECHNOLOGY

Grade 100 / 100  
Thesis Implementation of a C++ holographic experience

C C++ Java PHP MySQL Javascript HTML CSS

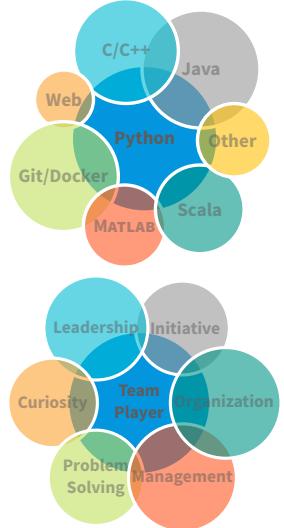
Prato, Italy

September 2011 - July 2016

## Skills

### TECHNICAL

- Programming** Python, Java, C, C++, Scala, MATLAB, Prolog, MiniZinc  
**Libraries** Qt, OpenCV, Django, Flask, SciPy (NumPy, Pandas, ...), SciKits (scikit-learn, scikit-image, ...), PyTorch, Keras, Spark, Z3  
**Tools** Bash, Git, Docker, L<sup>A</sup>T<sub>E</sub>X, Jupyter  
**Web** HTML, CSS, Javascript, jQuery, PHP, REST API, MySQL, Wordpress



### INTERPERSONAL

- Languages** Italian, English  
**Capabilities** Project planning, Project management, Teamwork, Leadership, Organization, Initiative, Curiosity, Problem solving, Modeling  
**Hobbies** Photography, Travelling, Food culture, Cuisine

### PREFERENCES

- Likings** Computer Vision, Machine Learning, Deep Learning, Natural Language Processing, Declarative/constraint programming  
**Dislikings** Web development (e.g. JS), .NET framework (e.g. C#)

# Experience



## Quid Informatica S.p.A.

PYTHON DEVELOPER · PART TIME

**Project**

Refinement of a text classification model and implementation of specialized extraction algorithms to parse OCR results

**Achievements** Trained a text classification model to categorize financial documents, using fastText

Python OpenCV Flask Tornado Unicorn SpaCy fastText Azure Cognitive Podman

Sesto Fiorentino, Florence, Italy

August 2020 - September 2020

## Quid Informatica S.p.A.

PYTHON DEVELOPER · FREELANCE

**Project**

Development of 3 production-grade Python micro-services working in banking environments, to classify and extract text from identity documents

**Achievements** Implemented NER (Named Entity Recognition) techniques to parse raw OCR results, using spaCy

Python OpenCV Flask Unicorn SpaCy Tesseract Google Vision ABBYY OCR.Space Azure Cognitive

Sesto Fiorentino, Florence, Italy

February 2020 - June 2020

## QI-Lab S.r.l.

PYTHON DEVELOPER · FREELANCE

**Project**

Identity documents OCR library development

**Achievements** Implemented edge detection and text detection techniques to improve OCR results, using OpenCV

Python OpenCV Django Tesseract Google Vision ABBYY Docker

Sesto Fiorentino, Florence, Italy

June 2019 - October 2019

## QI-Lab S.r.l.

PYTHON DEVELOPER · STAGE

**Project**

Identity documents OCR library development

**Achievements** Implemented a custom image binarization algorithm, using OpenCV

Python OpenCV Django Tesseract

Sesto Fiorentino, Florence, Italy

March 2019 - May 2019

## Continental S.p.A.

PYTHON DEVELOPER · FREELANCE

**Project**

Manually operated visual inspection digitalization

**Achievements** Development of a production-grade modular GUI working in industrial settings, using Qt

Python Qt

Fauglia, Pisa, Italy

January 2019 - September 2019

## Continental S.p.A.

PHP DEVELOPER · FREELANCE

**Project**

Insurance claims video verification interface

**Achievements** Gained some real-world knowledge about developing production software, using agile kanban techniques

PHP MySQL

January 2018 - March 2018

## easy claims

PHP DEVELOPER · STAGE

**Project**

Barcode handling GUI design and deployment

**Achievements** Gained insights about company environments and software design principles

Python Qt

Campi Bisenzio, Florence, Italy

June 2015

## Develer S.r.l.

PYTHON DEVELOPER · STAGE

**Project**

Barcode handling GUI design and deployment

**Achievements** Gained insights about company environments and software design principles

Python Qt

# Websites

## tognonishop.com



WEBSITE ADMINISTRATOR · FREELANCE

April 2020 - Now

**Project** Fashion (shoes) e-commerce website

Wordpress Woocommerce

## studio54italy.it



WEBSITE ADMINISTRATOR · FREELANCE

March 2020 - Now

**Project** Textile catalog website

Wordpress Woocommerce



## loscoiattolofirenze.it

WEBSITE ADMINISTRATOR · FREELANCE

March 2020 - Now



Project Fashion (clothes) e-commerce website

Wordpress Woocommerce

December 2018 - Now



WEBSITE ADMINISTRATOR · FREELANCE

Project Photography presentation website

Wordpress Squarespace Woocommerce Leadpages Deadline Funnel Kajabi Kartra

## Challenges

### DOMESTIC

2015 Finalist, RoboCup Junior Italia

Malpensa Fiere, Italy

2015 Finalist, OIS - Olimpiadi di Informatica a Squadre (6th edition)

University of Bologna

## Other info

### ITALIAN JOB MARKET

Si autorizza il trattamento delle informazioni contenute nel curriculum in conformità alle disposizioni previste dal d.lgs. 196/2003.

Si dichiara altresì di essere consapevole che, in caso di dichiarazioni non veritieri, si è passibili di sanzioni penali ai sensi del DPR 445/00 oltre alla revoca dei benefici eventualmente percepiti.