



# Alessio Falai

DATA/APPLIED SCIENTIST · SOFTWARE ENGINEER

[✉ falai.alessio@gmail.com](mailto:falai.alessio@gmail.com) | [🏡 alessiofalai.it](http://alessiofalai.it) | [⌚ Wadaboa](https://www.wadaboa.com/alessio-falai) | [🔗 alessio-falai](https://www.linkedin.com/in/alessio-falai/)

## Education

### Alma Mater Studiorum - University of Bologna



M.S. IN ARTIFICIAL INTELLIGENCE · COMPUTER ENGINEERING

Grade -  
Thesis -

Bologna, Italy

October 2019 - Present

Python SKLearn/PyTorch Prolog Scala Spark MiniZinc/Z3

### 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

Florence, Italy

October 2016 - October 2019

C Java MySQL Python

### I.T.S. Tullio Buzzi



HIGH-SCHOOL DIPLOMA IN INFORMATION AND COMMUNICATIONS TECHNOLOGY

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

Prato, Italy

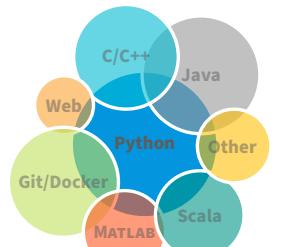
September 2011 - July 2016

C C++ Java PHP MySQL Javascript HTML CSS

## 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, Spark, Z3, OR-Tools  
**Tools** Bash, Git, Docker, L<sup>A</sup>T<sub>E</sub>X, Jupyter  
**Web** HTML, CSS, Javascript, jQuery, PHP, REST API, MySQL, Wordpress  
**Cloud** AWS (Sagemaker, EC2, ECS, Athena, SES, Quicksight, ...), Azure (Cognitive Services)



### 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

**Amazon**

APPLIED SCIENTIST · FULL-TIME

Cambridge, UK

November 2021 - Present

**Amazon**

DATA SCIENCE INTERN · APPLIED SCIENTIST I · INTERNSHIP

Virtual

February 2021 - August 2021

**Project**

Application of predictive and prescriptive analytics on HR metrics such as attendance and absenteeism

**Achievements** Worked in a multi-cultural team and managed to deliver multiple milestones across different projects

Python SKLearn AWS

**Quid Informatica**

Florence, Italy

PYTHON DEVELOPER · PART TIME

August 2020 - September 2020

**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

**Quid Informatica**

Florence, Italy

PYTHON DEVELOPER · FREELANCE

February 2020 - June 2020

**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

**QI-Lab**

Florence, Italy

PYTHON DEVELOPER · FREELANCE

June 2019 - October 2019

**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

**QI-Lab**

Florence, Italy

PYTHON DEVELOPER · INTERNSHIP

March 2019 - May 2019

**Project**

Identity documents OCR library development

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

Python OpenCV Django Tesseract

**Continental**

Pisa, Italy

PYTHON DEVELOPER · FREELANCE

January 2019 - September 2019

**Project**

Manually operated visual inspection digitalization

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

Python Qt

**EasyClaims**

Virtual

PHP DEVELOPER · FREELANCE

January 2018 - March 2018

**Project**

Insurance claims video verification interface

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

PHP MySQL

**Develer**

Florence, Italy

PYTHON DEVELOPER · INTERNSHIP

June 2015

**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

*Project* Fashion (shoes) e-commerce website

Wordpress Woocommerce

*Virtual*

April 2020 - August 2020



## **studio54italy.it**

WEBSITE ADMINISTRATOR · FREELANCE

*Project* Textile catalog website

Wordpress Woocommerce

*Virtual*

March 2020 - October 2020

## **LO SCIATTOL**



## **loscoiattolofirenze.it**

WEBSITE ADMINISTRATOR · FREELANCE

*Project* Fashion (clothes) e-commerce website

Wordpress Woocommerce

*Virtual*

March 2020 - June 2020

## **Walter Quiet**



## **walterquiet.com**

WEBSITE ADMINISTRATOR · FREELANCE

*Project* Photography portfolio website

Wordpress Squarespace Woocommerce Leadpages Deadline Funnel Kajabi Kartra

*Virtual*

December 2018 - June 2020

## **Challenges**

---

### **DOMESTIC**

2015 **Finalist**, RoboCup Junior Italia

*Malpensa Fiere, Italy*

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

*University of Bologna*

## **Certifications**

---

2021 **8.0 / 9.0**, IELTS for UKVI General Training

*Rome, Italy*

## **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.