



Alessio Falai

DATA/APPLIED SCIENTIST · SOFTWARE ENGINEER

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Education

Alma Mater Studiorum - University of Bologna



M.S. IN ARTIFICIAL INTELLIGENCE · COMPUTER ENGINEERING

Bologna, Italy

Grade 110 / 110 with honours

October 2019 - March 2022

Thesis Conditioning text-to-speech synthesis on dialect accent: a case study

Python SKLearn/PyTorch Prolog Scala Spark MiniZinc/Z3



Florentina Studiorum Universitas - University of Florence

Florence, Italy

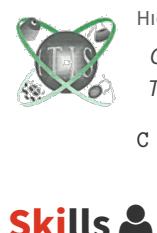
B.S. IN COMPUTER SCIENCE

October 2016 - October 2019

Grade 110 / 110 with honours

Thesis Refinement of a Python library to perform OCR on identity documents

C Java MySQL Python



I.T.S. Tullio Buzzì

Prato, Italy

HIGH-SCHOOL DIPLOMA IN INFORMATION AND COMMUNICATIONS TECHNOLOGY

September 2011 - July 2016

Grade 100 / 100

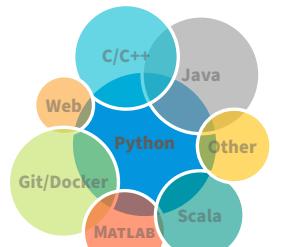
Thesis Implementation of a C++ holographic experience

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^AT_EX, 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



loscoiattolofirenze.it

WEBSITE ADMINISTRATOR · FREELANCE

Project Fashion (clothes) e-commerce website

Wordpress Woocommerce

Virtual

March 2020 - June 2020



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.