Antonio Ercole De Luca

Software Engineer

EXPERIENCE

Self-employed, Remote— Entrepreneur

October 2021 - Present

Bootstrapping three different projects: 1. Achieved 100 active users by building a Chrome Extension that helps to write prompts for Stable Diffusion. 2. Peaked 100 daily visitors from scratch using Programmatic SEO ranking products sold in restaurants using Sentiment Analysis (video explanation). 3. Achieved +40% ROI, in two years, by holding a portfolio of Exchange Traded Funds (ETFs) selected using a bayesian time series forecasting algorithm.

Molo Finance, Remote/London — Software Engineer

February 2022 - May 2022

Successfully launched a digital platform providing Residential mortgages to UK customers. Being part of a team working on refactoring the code-base; implementing backwards-compatible changes to RESTful API; bug fixing.

World Food Program, Remote/Rome — Software Engineer

March 2021 - October 2021

I pushed a team of 10+ engineers to adopt Scrum ceremonies and effective practices like daily stand-ups. I led junior developers in adopting homogenous testing practices after agreeing on internal TDD best practices. Evaluated and reported specific technical debts that occurred in past designs. I designed the foundations for e2e testing.

Consultant, Remote — Software Engineer

2017 - 2019

I worked with more than ten international clients on Upwork.com with 5/5 stars as median feedback. Three examples: 1. I designed an image similarity search engine with almost zero response time indexing more than 40k images sing an Approximate Nearest Neighbors data structure. 2. Zeroed client's cloud infrastructure costs by setting up docker and docker-compose and migrating a Django app and the relational database from Digital Ocean to Google Cloud Platform (GCP). 3. I built a Django app with 83% testing coverage using Test Driven Development.

Kiwi Campus, Berkeley, US — Software Engineer

2017

I brought more than 2k food delivery orders in less than two months by implementing an integration platform with the supplier.

Legalkite, Remote/Zurich — Backend Engineer

2016 - 2017

I designed several RESTful endpoints. I improved 10x REST API response time by translating Django ORM queries into raw SQL queries. I solved data inconsistency bugs by having refactored a relational database schema and making Elasticsearch a read-replica. I scaled 100x a data scraping module by porting it to Scrapy and Scrapinghub.

<u>SpazioDati</u>, Pisa, Italy — ML Engineer Intern

2015 - 2016

I designed a Human-in-the-loop Active Learning workflow using a crowdsourcing platform's API called CrowdFlower. I increased 2x F1-score in a Logistic Regression model used for Named Entity Linking using a technique called Uncertainty Sampling.

<u>Synthema</u>, Pisa, Italy — Software Developer

2014 - 2015

I made ready for production some steps in Natural Language Processing (NLP): Segmentation, Tokenization, POS, Stop Words, Dep. Parsing, NER. In different languages: Romanian, Japanese, Chinese and German. I was working on an EU-funded (5.6 Mln $\mathfrak E$) project: CAPER.

SKILLS:

Python

Docker

Django

Postgres

Google Cloud

AWS

Bash

Airflow

Optuna

Pandas

Prophet

Scrum

Selenium

SQL

TDD

Javascript

Typescript

React

LANGUAGES

English

Spanish

Italian

Open-Source Contributions:

<u>Linkedin</u>

Dask

Self-employed Projects:

write-ai-art-prompts.com where2buy.it

where2invest.in

ORGANIZER

PyData Las Palmas

Python Meetup Palermo

Contacts:

eracle@posteo.eu

EDUCATION

Computer Science – Bachelor's Degree University of Pisa, Italy

2007 - 2010

Thesis on Natural Language Processing: Document classification using lexical and semantic resources.

Data Science and Business Informatics - *Master's Degree* University of Pisa, Italy

2011 - 2013

Thesis on Natural Language Processing: Applying Active Learning on Entity Linking.

Statistics & Data Science - Bachelor's Degree University of Palermo, Italy

2019 - 2020

Financial Mathematics, Finance Theory, Multivariate Analysis, Inference, R Language, Probability.