

# 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 a technique called Programmatic SEO which ranks products sold in restaurants using Sentiment Analysis ([video explanation here](#)). 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 doing: Code refactoring; implementing backwards-compatible changes to RESTful API; bug triaging and 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. Led junior developers adopting homogenous testing practices by standardizing and settling down with other senior engineers our 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 10 international clients on Upwork.com receiving 5/5 stars as median feedback. Three examples: 1. I designed an image similarity search engine with near zero response time that was indexing more than 40k images by using 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 by using Test Driven Development.

### [Kiwi Campus](#), Berkeley, US — Software Engineer

2017

I brought more than 2k food delivery orders in less than 2 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 1. Refactoring relational database schema. 2. Making Elasticsearch a read-replica. I scaled 100x a data scraping module by porting it to Scrapy and Scrapinghub.

### [SpazioDati](#), 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.

## 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:

[Linkedin](#)

[Dask](#)

[OpenTapioca](#)

## Self-employed Projects:

[write-ai-art-prompts.com](#)

[where2buy.it](#)

[where2invest.in](#)

## ORGANIZER

PyData Las  
Palmas

Python Meetup  
Palermo

## [Synthema](#), Pisa, Italy — Software Developer

2014 - 2015

I productized 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 €) project: namely CAPER.

## EDUCATION

### University of Pisa, Italy

*Computer Science – Bachelor's Degree*

2007 - 2010

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

### University of Pisa, Italy

*Data Science and Business Informatics – Masters Degree*

2011 - 2013

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

### University of Palermo, Italy

*Statistics & Data Science – Bachelor's Degree*

2019 - 2020

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