Antonio Ercole De Luca

Senior Software Engineer
Bayesian Machine Learning Engineer

SKILLS

- Python
- SQL
- Pandas
- Django
- Docker
- Kubernetes
- AWS
- Google Cloud
- Selenium
- Bayesian Inference
- FBprophet
- Dask
- Optuna
- Scrum
- TDD

LANGUAGES

- Italian
- English
- Spanish

CONTACT

✉ • E-mail:
eracle@posteo.eu

• Personal web site:
https://eracle.me

PROFILE

I am a Senior Software Engineer, working as a consultant since 2016, having shifted over different roles such as Machine Learning Engineer, Data Architect, Data Scientist, DevOps, and Scrum Master.
I have worked on all aspects of data management such as retrieval, storage, cloud infrastructure scaling, data analysis, and mining; encompassing web scraping, design of relational databases, cloud deployment, RESTful API, and Jupiter Notebook.
In 2019 I took a couple of sabbatical years to get into the world of Statistics & Finance.
During my career, I also contributed to two scientific papers in the field of Web Scraping and Data Visualization.

WORK EXPERIENCE

Consultant, Remote (2017 - 2019)

Data Architect
Worked with more than 10 international clients on Upwork.com receiving 5/5 stars as median feedback.
Some stories:
  - Designed an image similarity search engine with near zero response time, indexing more than 40 000 imgs by using Approximate Nearest Neighbors data structure;
  - Reduced client's cloud infrastructure costs by dockerizing a django app and migrating from Digital Ocean to Google Cloud;
  - Built a django app with 83% testing coverage by using Test Driven Development.

Legalkite Ltd, Zurich (2016 - 2017)

Back-end Software Engineer
Design of several RESTful endpoints;
Improved 10x REST API response time by translating django ORM queries into raw SQL queries;
Solved data inconsistency bugs by:
  - Refactoring postgres schema;
  - Making Elasticsearch a read-replica;
Scaled 100x scraping module by porting it to scrapy and scrapinghub.

SpazioDati, Pisa, Italy (2015-2016)

Machine Learning Engineer
Design of a Human-in-the-loop Active Learning workflow using CrowdFlower API (now Appen).
Increased 2x F1-score in Logistic Regression model used for Named Entity Linking by using Uncertainty Sampling.

Synthema, Pisa, Italy (2014-2015)

Software Developer
Productionize Natural Language Processing steps:
Segmentation, Tokenization, POS, Stop Words, Dep.Parsing, NER;
(Romanian, Japanese, Chinese and German)
EU funded (5.6 Mln €) project: CAPER.

EDUCATION

Bachelors Degree   (2019 - 2020)
Statistics & Data Science
Università di Palermo, Italy
Financial Mathematics, Finance Theory, Multivariate Analysis, Inference, R Language, Probability.

Masters Degree   (2011 - 2013)
Data Science and Business Informatics
University of Pisa, Italy
Thesis on Natural Language Processing:
Applying Active Learning on Entity Linking.

Bachelors Degree   (2007 - 2010)
Computer Science
University of Pisa, Italy
Thesis on Natural Language Processing:
Document classification using lexical and semantic resources.