Antonio Ercole De Luca

Data Architect Jr. Quantitative Developer

PROFILE

I am a Data Architect, working as a consultant since 2016, having shifted over different roles such as Software Developer, Data Scientist, ML Engineer, DevOps and Scrum Master. I have worked on all aspects of data management such as Retrieval, Storage, Cloud Scaling, Analysis and Mining; encompassing Web Scraping, Design of Relational Databases, Deployment of Cloud Infrastructure, RESTful interfaces and Jupiter Notebooks.

In 2019 I left consultancy to become a quantitative developer.

During my career, I also contributed on two scientific papers on the field of Web Scraping and Data Visualization.

SKILLS

- **Python**
- SQL
- **Pandas**
- Django
- Docker
- Kubernetes

LANGUAGES

- Italian
- English
- Spanish

WORK EXPERIENCE

Consultant, Remote (2017 - 2019)

Data Architect

Worked with more than 10 international clients on Upwork.com and 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 diango 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 gueries;

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 MIn €) project: CAPER.

(2019 - 2020)

(2007 - 2010)

EDUCATION

Bachelors Degree

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

Computer Science

University of Pisa, Italy

Thesis on Natural Language Processing:

Document classification using lexical and semantic resources.

REFERENCES

Massoud Zekeria Founder at LegalKite Ltd massoud.zekeria@gmail.com

Sasha latsena Product Manager at Google sasha@iatsenia.xvz

Ugo Scaiella Software Development Manager at SpazioDati P. +39 050 754243 scaiella@spaziodati.eu

