

LORIS CRO

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PRODUCT ENGINEER • TECHNICAL LEADER

A strong technical knowledge coupled with 5 years of professional experience allows me to have a very fine-grained vision of the current technological landscape, thus being able to make rational decisions for all levels of the software stack, while always keeping in mind the — not necessarily technological — tradeoffs.

My formal education, which focused on data engineering and analysis, culminated in my participation in the Google Summer of Code 2014 project, and was further solidified in a year-long experience as Data Engineer at Transcrime, the Criminology Research Centre of Università Cattolica del Sacro Cuore. This knowledge allows me to address both the ever-increasing data processing needs of modern systems, and the need of evaluating a product's performance through statistical means.

While motivated by the pursuit of technical excellence, I place deep value in proper communication and a solid managerial process. Many of my professional experiences required me to communicate effectively both between team members and with non-technical stakeholders.

EDUCATION

University (class of 2014) | BSc in Computer Science (Bioinformatics), University of Studies of Milan - Bicocca
Natural Languages | **Italian:** Native speaker • **English:** European C2 level (Advanced).

CORE QUALIFICATIONS

Communication	I always put great effort in trying to understand my interlocutor's point of view and how to bridge an eventual gap in our mutual understanding. I appreciate frank, relaxed and explicit conversations aimed at getting things done and furthering knowledge sharing.
Mentoring	I love staying in an environment where people genuinely enjoy furthering their technical knowledge and mentoring is one of the most fundamental activities to foster them.
Leadership	I am very opinionated but always reasonable and open to discussion. In matters of technical decisions, I'm well aware that knowing the limits of my knowledge is extremely important and that there is no strictly dominant solution, more often than not. In those cases, open discussion and gathering of mindshare can be more important than the technical merits alone.
Time Management	I appreciate scheduled meetings and, in general, respectful use of both other people's time and mine. In my experience I learned that the best managers maximize the utility of other people's time, instead of their own.

TECHNICAL SKILLS

Languages	C C# Go ★ JS ★ Python ★ Swift
Frameworks	BeautifulSoup Bootstrap D3 Django ★ Flask Numpy Pandas React ★ React Native ★ Redux ★ Scrapy ServiceStack SocketIO ★ Tensorflow scikit-learn
Tecnologies	Azure Docker ★ Elasticsearch ★ GCP HTML/CSS HTTP ★ MongoDB ★ Nginx NodeJS PostgreSQL Redis ★ Websockets ★
Concepts	Concurrency ★DDD Data Engineering ★ Distributed Locks Dynamical Systems Git Flow Microservices NLP Probabilistic Data Structures ★ Scrum ★ Sockets ★ Testing UNIX iOS Development

RECENTLY MADE BY ME

RedisConf 2018
San Francisco

C Python Redis

Probabilistic Data Structures

Testing

Implementing a new data structure for Redis

Link: <https://youtu.be/pmxaztRsoF4>

In my talk I present redis-cuckoofilter, a Redis module written by me that implements the homonymous probabilistic data structure with an innovative interface designed for the distributed use case. Not being an expert C programmer, I also showcase my approach to testing the module, which is especially important for data structures and algorithms that exhibit probabilistic behaviours.

WORK EXPERIENCE

2017/06 - Today
Milan, Singapore

C# Go JS Python Django

ServiceStack Azure Docker

ElasticSearch HTTP MongoDB

RabbitMQ Redis Concurrency

DDD Git Flow Microservices

Scrum Sockets

Fullstack Software Developer - 4ward Srl

My involvement with 4ward can be divided into two main moments: working in various small consultancy projects for the first 3 months, and then taking part in a bigger scale project for UTU Pte Ltd. The first part of the work experience made full use of my fullstack expertise, while for the second part I was in charge of developing a financial transaction processing service with strict throughput and reliability requirements, which was part of a larger fintech product. All projects were conducted following the Scrum agile methodology.

- (Internal) In charge of mentoring a team of 4 developers on the use of Python, Django, ElasticSearch and programming best practices.
- (Maxfone Srl) Supported the client through a migration from SQL to {MongoDB, ElasticSearch, Redis} by offering analysis services and formation days. The formation days included topics such as: source control, agile methodologies, Docker, and React/Vue.
- (UTU Pte Ltd) Went to Bangalore for a week to perform an assessment of the client's local development team and offered some formation days on: architectural design patterns, continuous delivery, git flow and agile methodologies.
- (UTU Pte Ltd) Took part in a multi-team fintech project and moved for 6 months to Singapore. I was in charge of developing in Go an integration service to process financial transactions. The system had very strict throughput and reliability requirements. The development process involved implementing a ISO8583/TCP protocol and the use of Probabilistic Data Structures to properly satisfy the requirements.

2016/02 - 2017/06
Milan

JS Python R BeautifulSoup

D3 Numpy Pandas Scrapy

scikit-learn ElasticSearch

Dynamical Systems

Markov Chains NLP

Data Engineer - Transcrime, Criminology Research Centre of Università Cattolica del Sacro Cuore

Hired with the main goal of enhancing and streamlining the data processing needs of the research centre, on occasion I was able to offer insight on some problems that involved dynamical systems, as my formation as Bioinformatician was in good part focused on their formal analysis.

- Web Crawling of open sources to gather data with regards to contraband, organized crime and terrorism.
- Creation of an internal full-text search system for enrichment (tagging, cleanup, ...) and better consultation of the gathered data.
- Provided support to explorative analysis and visualization of quantitative datasets.
- Designed a methodology to analyze the phenomenon of cigarette trafficking as a dynamical system in a report for PMI, BAT, JT, and Imperial.