Curriculum Vitae

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Contacts

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▷ GitHub
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Studies and Works

Data Scientist - General System - 2020-Present

Geospatial data Science Services: Startup in stealth mode until April 2022

- ▷ Developing prototypes to automate spatiotemporal data analysis at scale with clustering method, dashboards and KeplerGl visualisation.
- ▷ Collaborating with clients and domain experts to quickly and iteratively integrate feedback into prototypes.
- ▷ Prototypes handover to production and DevSecOps teams.
- ▷ Developing and open sourcing python libraries to provide users tooling and examples of the Data Flow Index.
- ▷ Presenting algorithmic research to stakeholders - clustering, dynamic programming, Bayesian filtering.
- ▷ Contributing to the company blog with technical articles to build a community around the topics of spatiotemporal data science.

Algorithm Engineer - Pace Revenue Management - 2019-2020

Dynamic pricing for the hospitality industry

- ▷ Simulation and Validation team, aimed at validate and test the python-based ETL pipelines and the core algorithms.
- ▷ Production code maintenance and new features integration.

Back End Developer - Thought Machine - 2018-2019

Cloud native core banking

- ▷ State-of-the-art infrastructure technologies to deploy microservices in a cloud-agnostic environment: Python, Go, Docker, Kubernetes, and derived customisations.
- ▷ Maintenance and improvement of the Thought Machine's CI/CD and release pipelines.

MRes + PhD in Medical Image analysis - UCL CDT - 2015-2019

Research Student

- ▷ Pre-clinical trial on pre-term birth steroids administration in a multi-disciplinary international research team.

- ▷ Published 7 peer reviewed papers also on Neuroimage and Nature Scientific Report about diffeomorphic image registration and Machine Learning for automated MRI segmentation.
- ▷ Recipient of best young scientist poster award at the first Workshop on Assistive Technology for Fetal Therapy and Surgery.
- ▷ Reproducible research advocate: open sourced 12 Python libraries (Sec 7.2.2 of my PhD Thesis), and one micro MRI dataset.

Industrial Simulation Modeller - SimTec - 2013-2014

Automotive industry, discrete events simulation

- ▷ Material flow simulation models to estimate efficiency, remove bottlenecks, dimension buffers and support plant layout design for a range of clients in Italy and Germany.
- ▷ In house shortest paths algorithms development for the internal and external logistics of assembly parts, from plant's gate to assembly line.
- ▷ Presented at the first annual Tecnomatix Plant Simulation User Conference in Stuttgart.

Developer - TcWeb - 2011

Web development and technology consulting

- ▷ Term contracts as Junior Developer in Java, Java J2EE, Struts 2, Uml, Android.
- ▷ Algorithms developer: prototyped and implemented a generalised Hungarian Algorithm to parse newspapers' pages.

Bachelor + Master degree in Mathematics - UNITO - 2006-2014

Universita' degli Studi di Torino

- ▷ Graduated in Mathematics with specialisation in Computational Geometry.
- ▷ Master of Science in Mathematics: Thesis.

Volunteering

Maths tutoring programme - Action Tutoring - 2017-2018 and 2019-2020
At the City of London Academy Highgate Hill College.

Skills

Research, data science, algorithms development and prototypes productionisation, pragmatic and goal oriented, collaboration across domains.

Prototypes: Python (OOProgramming, Streamlit, Jupyter, Numpy, scipy, Scikit-Learn, Matplotlib, Pandas, geopandas). Also: Matlab, Maple, PariGP.

Production: FastAPI, PostrgreSQL. Also: C++, Java, Rust, Go, Kubernetes, Helm.

Methods: AGILE, jira, phabricator, git, github, gitlab, Docker. CI/CD automation, unit testing, integration testing, test driven development. Code reproducibility, static documentation, dev-prod parity advocate.