DIEGO SONAGLIA

Leiden, NL · di3go-sona.dev

EXPERIENCE

Software/DevOps Engineer (HPC/Linux/AI)   Amsterdam, NL
Clustervision Solutions · Full Time   9 months · Aug 2023 - Presemt

- Contributing several Ansible and Python modules to TrinityX and Luna2, the ClusterVision open-source cluster manager and image provisioner
- Rewritten the entire monitoring stack of TrinityX using the Prometheus/Grafana instead of Sensu
- Development of a CI pipeline to prepare and destroy a vSphere multi-node cluster, for end to end TrinityX testing.
- Development of a CI pipeline to build, test and release Go binaries and Python packages

> **Technologies**
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> 🐍 Python, 🐚 BASH, 🐹 Go, 🅰 Ansible, 🌱 Flask, 🔥 Prometheus, 🌀 Grafana, 🎩 RedHat, ⊙ Ubuntu, 🦊 Gitlab CI/CD, 🔲 vSphere

Machine Learning Engineer   Rome, IT
Business Integration Partners · Full Time   11 months · Aug 2022 - Jul 2023

- Predictive models for customer behaviour and Recommender Systems
- PySpark Data Pipelines
- Deployment and Operations of predictive models on GCP

> **Technologies**
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> 🐍 Python, ✨ PySpark, 🗄 SQL, 🔬 sk-learn, 📐 matplotlib, ☁ GCP(VertexAI, BigTables, AutoML)

Machine Learning Engineer (Traffic Monitoring)   Rome, IT
Redev Technologies · Full Time   4 months · Feb 2022 - May 2022

- Development, Training and deployment of Computer Vision models for Traffic Monitoring and License Plate Transcription on edge devices like Nvidia Jetson Nano.
- Improvement of MLOps by spreading the adoption of data versioning trough DVC and DagsHub. Deployed an internal CVAT server for annotation.

> **Technologies**
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> 🐍 Python, 🔥 PyTorch, 🎐 Tensorflow, 🐳 Docker, 👁 OpenCV, ⬛ Deepstream, 🆅🅲 DVC

Machine Learning Engineer (Earh Observation)   Rome, IT
Erasmicoin Srl · Part Time   2 years · Jan 2020 - Jan 2022

- Development of various ML models for Ground Usage Classification using Recurrent and Convolutional Neural Networks on a mixture of Satellite and auxiliary data (Sentinel-1, Sentinel-2, Weather history, Elevation maps)
- Development of various REST services and a custom Map Server based on STAC and WMTS

> **Technologies**
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> 🐍 Python, 🔥 PyTorch, 🎐 Tensorflow, 🐳 Docker, 🌱 Flask, 🗺 GDAL/OGR, 🇯🇸 JS

Undergraduate Researcher   Rome, IT
Sapienza, University of Rome · Contract   6 months · Jun 2020 - Dec 2020

- Research, Benchmarking and Documentation of the cryptographic primitives and protocols implemented by the Italian Electronic Identity Card (ISO/IEC 7816 and ISO/IEC 14443)
- Prototyping and implementing a simple challenge-response scheme to use the Italian Electronic Identity Card as a 'digital wallet' for public transports and museums access. cie-minimal-auth

Programming:	`Python`, `Golang`, `Javascript ( but also Java and C )`
Machine Learning:	`Pytorch`, `Tensorflow`, `SK-Learn`, `Pyspark`
MLOps:	`DVC`, `Dagster`, `Airflow`, `Wandb.ai`, `DagsHub`
DevOps:	`Ansible`, `Docker`, `Kubernetes`, `Gitlab CI/CD`
Cloud:	`GCP`, `AWS`
IoT/Edge:	`Mqtt`, `Arduino`, `RaspberryPi`, `Nvidia Jetson Nano`

EDUCATION

MSc Computer Science & Engineering   Rome, IT
Sapienza, University of Rome   Sep 2019 - Sep 2022

- **Topics**: Advanced Algorithms and Data Structures, Distributed Systems, Data Science, Information Retrieval, Machine Learning

- **Activities**: Research Scholarship on security features of Italian EID Card

- **Thesis**: Exploring Question Answering over Knowledge Graphs with XAI techniques

- **Score**: 110/110 cum Laude

BSc Computer Science & Engineering   Rome, IT
Sapienza, University of Rome   Sep 2016 - Sep 2019

- **Topics**: Algorithms and Data Structures, Operating Systems, Database Management Systems, Networking, Embedded and Low Level Programming, Cybersecurity Fundamentals

- **Activities**: CyberChallenge.IT participant, Computer Lab assistant, Exhange student at UPV

- **Score**: 110/110 cum Laude

LANGUAGES

Italian:	C2 - Native
English:	C2 - Fluent
Spanish:	B2 - Proficient
French:	A2 - Basic
Dutch:	A1 - Very basic

HOBBIES

Bouldering · Reading · Guitar playing · Cooking · Camping