Domagoj Korais

Data scientist, background in software development and physics.

email Linkedin GitHub

Current Working position

Data scientist at Sinergise and Planet Labs. (Sinergise was acquired by Planet Labs in September 2023). Sept-2020-now

Activities:

Building solutions based on the application of machine learning algorithms to satellite observations. Time series analysis and classification.
Communication of results to clients and to the public.
Managing of production projects, from client onboarding to final delivery of results.
Organization of journal clubs to keep the team up to date with the state of the art.
Technology stack: Python and the relative data science stack, AWS for data storage and cloud computing, Git as versioning system, Agile methodology and Gitlab to organize the work. Ray and Dask for scheduling. Parquet data format for batch analytics.

Previous Working experience

Junior software developer at Cybertec, Trieste (Italy). Oct 2018-Sept-2020

Activities:

Developing mainly server side the company's APS (advanced planning and scheduling) Web application, using Typescript, Node.Js, SQL, Backbone.js, some C++.
Implementing new functions based on customer necessities.
Using Selenium Web Driver for automated browser-based testing.
During the master thesis we developed a rule-based system in order to make the company product more competitive. The main idea is to translate domain knowledge into rules, expressed using linguistic variables, and than fine-tune the mapping between linguistic variables and quantitative values using machine learning.

Education

Master degree in Data Science and Scientific Computing Sept 2017 - March 2020

Grade: 110/110.
University: Università degli studi di Trieste, Trieste (Italy).
Thesis: "An active learning rule based decision support system for production planning."
Acquired knowledge:

- Statistics, Bayesian statistics, Machine learning, data visualization, computer vision, artificial intelligence, relational databases.
- Programming languages: C++, Python, R.
- Introduction to HPC concepts using MPI, OpenMp and CUDA on a cluster.
- Linux: bash.
- Versioning: git.
- Agile development concepts and methods (test driven development, continuous integration) in Java.

Erasmus+ traineeship in Slovenia Apr 2016 - Sep 2016

Traineeship at the Karst research institute located in Postojna. My research focused on the study of the relation between external and internal weather conditions, using available meteorological data and in-situ data loggers.

Bachelor of physics Sep 2011 - March 2016

Grade: 96/110.
University: Università degli studi di Trieste, Trieste (Italy).
Thesis: “Gravimetric survey of the “Grotta Impossibile” cave.”
Thesis publication (not peer reviewed): “Atti e Memorie della Commissione Grotte“E. Boegan””

Scientific high school degree Sep 2006 - Jul 2011

Liceo scientifico Paolo Ruffini, Viterbo (Italy).