Luigi Belli

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GOAL

Career in data science and astrophysics and cosmology possibly in:

- Fundamental Research
- Applied space science
- Industrial Research and Development

SKILLS

Python - R - MySQL - Bash - ML/DL: Pytorch, Optuna, ScikitLearn, Keras - Distributes systems: Dask, NFS, Kafka, Apache Spark - Linux -

WHO AM I + PROJECTS

I am leveraging my Master's program to fuse my extensive background in physics and astronomy with state-of-the-art technology. My objective is to become a professional who synthesizes these domains, acting as a catalyst for innovative projects and experimental initiatives.

Projects

- Hierarchical mergers of black holes [Data visualization + Random Forest]
- Notes of General Relativity [Vim + Latex]
- Miscellaneous DL and ML algos [ScikitLearn+Keras, Restricted Boltzmann machines, XGBoost, Clustering]
- Bayesian networks [R, Simulated Annealing, K2 algorithm]
- GalaxyClassifier-CNN [Pytorch, Optuna]
- Cord19 Analysis [Dask, Cluster setup, NFS, MapReduce, NLP: word2vec + Cosine Similarity]
- Carrom Tournament Bot [Telegram Bot API, Docker, MySQL]

EDUCATION

University of Padua

Student of Physics of Data

2024-

University of Padua

Bachelor in Astronomy

2019-2024

• Thesis: Formazione di sistemi binari buco nero-stella: il caso di Gaia BH1 e Gaia BH2. Supervisor: Prof. Giuliano Iorio. Co-supervisor: Prof.ssa Sara Rastello.

High Energy Astrophysics International Data Camp

INTERESTS

Julia - Sewing clothes and accessories -