Ruggero De Vita, PhD
Senior Data Scientist

Solid analytical background, programming proficiency and presentation skills. Proven track record in successfully applying modern machine learning solutions to a variety of industrial and academic applications.

Professional Experience

Mar 2022 - Today
Senior Data Scientist at Tiko

Nov 2021 - Mar 2022
Senior Data Scientist Consultant at Ernst & Young

For a Manufacturing company:
- Development of a Random Forest Regressor for the prediction of the optimal price of cooling and refrigeration systems based on past transactions, properties of the market, and technical specifications
- Model interpretation through Shapley values and root cause analysis through decision trees' visualisation tools

Giu 2019 - Nov 2021
Data Scientist Consultant at Capgemini Engineering:

For a Major Electrical company:
- Development of machine learning models (artificial neural network - multilayer perceptron) for the predictive maintenance of electrical assets with regard to external disruptive factors such as ice formation on conductors or vegetation growth.
- Backend support for a dashboard to monitor key performance indicators related to asset degradation and anomaly detection (forecasting with additive models using Facebook's Prophet)
- Extensive time series analysis - linear and auto regressive models, Facebook's Prophet.

For a Major Telecommunication company:
- Training and deployment of a machine learning model (Random Forest Classifier) to evaluate the risk of customers to miss the payment of recurrent invoices
- Software development and engineering in BigData frameworks (ApacheHadoop & PySpark), relying on Cloud facilities(AWS), versioning tools and testing practices

Education

2016-2019
Doctor of Philosophy (Astrophysics);
The University of Melbourne; Testamur

2012-2015
Master of Science (Physics);
Università degli studi di Milano; 110/110 cum laude

2008-2012
Bachelor of Science (Physics);
Università degli studi di Milano; 100/110

⌂ 20090, Buccinasco (MI), Italy
☎ +39 340 5931146
✉ devita_9@hotmail.com
🌐 ruggerod.github.io

⚙ Core skills

PROBLEM SOLVING
Machine Learning · Advanced Analytics · Statistical Analysis · Business Insights · Model Explainability · Project Management

PROGRAMMING
Cloud Computing · Code Versioning & Testing · Parallel Computing

PRESENTATION
Written (Scientific Publications) · Oral (Public Talks and Teaching Experience) · Data Representation

SOFT
Detail Oriented · Driving Results · Teamwork · Critical Thinking · Resiliency · Leadership

✎ Technical tools

Python · Pandas · SKLearn · PySpark · Git · AWS · Django · Javascript · C++· HTML · SQL · Docker

麻 Languages

Italian (Native)
English (Proficient)

⚐ Interests

Boardgames
Travel Video

Honours and Awards

2017-18	Travel Grants (tot. 5,000 AUD)
2016	ND Goldsworthy Scholarship (21,000 AUD in 3.5 years)
2015	Melbourne Research Scholarship (100,000 AUD in 3.5 years)
2015	Angelo della Riccia Travel Scholarship (5,500 EUR)

International Research Visits

Oct 2017	**HARVARD** visiting researcher (2 months), Cambridge (MA)
Mar 2016	**CAMK** visitor (1 week), Warsaw (POL)
Jan 2016	**MPIA** visitor (4 months), Heidelberg (GER).

Certifications

Oct 2020	Spark and Python for Big Data with PySpark by Udemy
Feb 2018	Neural Networks and Deep Learning on Coursera
Oct 2017	Machine Learning by Stanford University on Coursera
Sep 2015	IELTS, Score: 7.0, equivalent CEFR level: C1

Scientific Publications

- **de Vita R.**, Trenti M., MacLeod M., 2019, MNRAS, 485, 5752
- **de Vita R.**, Trenti M., MacLeod M., 2018, MNRAS, 475, 1574
- **de Vita R.**, Trenti M., Bianchini P., et al. 2017, MNRAS, 467, 4057
- Askar A., Bianchini P., **de Vita R.**, et al. 2017, MNRAS, 464, 3090
- **de Vita R.**, Bertin G., Zocchi A., 2016, A&A, 590, A16

Seminars and Conferences

Nov 2017	Introduction to high performance computing (ADACS); (AUS)
Jun 2017	Globular cluster systems and their host galaxies; (ITA)
Apr 2016	Contributed talk, MODEST 16; (ITA)

Teaching Experience

2017	**Laboratory coordinator**, The University of Melbourne; Subject: "Introduction to Life Earth and Universe"
2016	**Laboratory demonstrator,** The University of Melbourne; Subject: "From the Solar System to the Cosmos"