DOINA VASILEV

LANGUAGES

English - Advanced knowledge

Italian - Native

Romanian - Native

German - Intermediate knowledge

Russian - Basic knowledge

CERTIFICATIONS

IELTS English Certificate - **C1** Level

Università degli Studi di Milano: CEFR English - **C2** Level

COMPUTER SKILLS

Microsoft Office: **PowerPoint**, **Excel**, and **Word.**

Programming languages:
- **Python** for statistical analysis:
  - Pandas, Numpy, Scikit-learn, PySpark, Tensorflow, Pytorch
- **R**
- **SQL**

Good knowledge of **PostgreSQL** and **MongoDB**
Familiarity with **AWS Cloud Services**, **Google Colab**, **DataBricks.**

Canva and **Prezi** for presentations

Familiarity with video-editing tools and video-conference tools such as Microsoft Teams and Zoom.

CONTACT INFORMATION

My Linkedin

You can find my projects at: https://github.com/doinav

EDUCATION

Master's Degree in Data Science and Economics
Università degli Studi di Milano
October 2021 - March 2024
Milano
Acquired experience and knowledge in:
Programming languages such as **Python, R, SQL**
Machine learning algorithms
Deep Learning
Cross-sectional statistical analysis
Time series analysis
Cybersecurity
Econometrics
Policy Evaluation
Language Models
Bayesian Analysis
Natural Language Processing
Large Language Models
Master thesis:
Evaluation of Semantic Shift: The case of circular economy
(Main supervisor: Alfio Ferrara,
Co-supervisors: Elena Verdolini, Silvia Salini)
Final Grade: 110L

Bachelor's Degree in Economics
Focus on Economics and Finance
Università degli Studi di Padova,
Padova, 2018 - 2021
I've developed skills and acquired knowledge on the economic, financial and banking systems.
I've written my final thesis on the **impacts of human capital on industrial emissions** (Supervisor: Prof. Thomas Bassetti)

Diploma di Liceo Linguistico
Istituto di Istruzione Superiore P. Scalcerle,
Padua, 2013 - 2018

PROJECTS AND LABS

ISTAT: Organisation and data of the Italian national institute of statistics
April - June 2022
During the laboratory, I had the chance to learn how to read and interpret official statistical data in press releases, how to navigate datawarehouses, and how to trasmit and disseminate information.

PRADA: Cloud and Distributed Environments for Analytics in a Luxury Brand
March - April 2023
Using PRADA's database, I've worked on generating a products' recommendation system, to be applied on PRADA's website.
To do so, we used **ALS**, i.e., Alternating Least Squares, a matrix factorization algorithm, using **PySpark**.
During the lab I had the chance of learning **DataBricks**.

PERSONALIZED HEALTHCARE:
May 2023 - September 2023
The project, in collaboration with the Department of Medicine and Biostatistics at the University of Milan, consisted in training machine learning algorithms to model the relationships between aminoacids and sphingolipids.
To do so, we used:
- **Canonical Correlation Analysis**, **PCA** and **Kernel PCA**, in order to detect potential linear and non-linear correlations.
- **Bayesian Network Analysis,** to analyse the conditional dependencies among the amino acids.

WORK EXPERIENCE

Research Assistant
CMCC Foundation - European Institute on Economics and the Environment
Milano,
March 2024 - currently
In my role as a research assistant at the European Institute on Economics and the Environment under the "HEU AdJUST" project, my responsibilities include:

- Conducting research support and dissemination activities for the project.
- Utilizing Natural Language Processing (NLP) methods and tools to enhance understanding of the Just Twin Ecological. Digital Transition and Circularity.

I'm currently writing a paper with professor Elena Verdolini on the semantic evolution of key environmental concepts, such as Circular Economy and Just Transition, using Natural Language Processing.
Eventually, I want to be able to perform multiple analyses using Machine Learning algorithms and Data Science techniques for the advancement of Environmental research.

Junior Data Scientist
Internship
S2E: Business and Technology Consultants
Milano,
 October 2023 - March 2024
I worked as a **junior data scientist** and **analyst** within the Advanced Analytics Business Line of a consultancy firm.
My tasks included:

- Performing analysis on data, and model data to generate forecasts.
- Monitoring production data.
- Developing the software infrastracture of chatbots and other projects.
- Develop Large Language Models for text summarization, text generation and translation.

Throughout my role, I have gained substantial experience and consolidated key competences in:

- **AWS cloud services**,
- **Python**,
- **SQL**,
- **Artificial intelligence**.

Borsa Italiana Internship: Modeling, Clustering and Forecasting Post Trade data
Borsa Italiana
Milano, Jan. - March 2023
After a multiple-step interview process, I was selected among 5 other students to intern at Borsa Italiana.
During the internship I've gained experience with several machine learning techniques, such as **XgBoost**, **CatBoost**, and **Neural Networks** for modelling, clustering and forecasting Post Trade data. As my final project, I developed smaller models that could improve the accuracy rates, each tailored to different credit institutions separated according to their size. Not only have I improved my coding skills, but thanks to this internship I gained experience with AWS cloud services

Tutor for "Data Science 4 Citizens"
University of Milan
Milano/Piacenza, Jan. - April 2023
 I was assigned to a group of 5 high school students to tutor on data science. I helped them develop a data science project: we first conducted an extensive exploratory data analysis on a dataset provided by Spotify Web API, on which we applied linear and logistic regressions to predict song popularity, and finally we performed cluster analysis of the data. Finally, the project was presented during the event "**Seeds from DEMM: #Next Generation Data**". The internship has helped me improve my communication and visualization skills, as my main task required to explain complex concepts in an approachable but comprehensive way.

Erasmus + Intership
Humboldt-Universität of Berlin
Berlin, 2017

Promoter
Agorà s.r.l.
Padua, 2018

Tutoring
Padua, 2018 - Present
I currently provide assistance to students in Maths, English, German, Russian and help students with their homework.

Intership
Libreria Progetto S.n.c.
Padua, 2016
I provided assistance to the workers.