

Thomas Rosso

COMPUTER SCIENCE · WEB AND AI · DATA SCIENCE

Italy

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Education

UNUD(Università degli studi di Udine)

Udine, Italy

B.S. IN INTERNET OF THINGS, BIG DATA AND WEB

Sep. 2018 - Apr. 2022

- Multidisciplinary course including Computer Science, Data Science, Web, Human Computer Interaction, Algorithms and Data Structures, Calculus

UNPD(Università degli studi di Padova)

Padua, Italy

M.Sc. IN DATA SCIENCE

Sep. 2022 - Current

- Multidisciplinary course covering a broad range of theories and tools from engineering, computer science, mathematics, statistics, machine learning, artificial intelligence, and big data.

IST(Instituto Superior Técnico)

Lisbon, Portugal

ERASMUS - EXCHANGE STUDENT

Sep. 2023 - Jun. 2024

- During my Erasmus+ exchange at IST Lisboa, I specialized in Data Science, focusing on Machine Learning, Big Data Analytics, and Statistical Methods. Collaborating with international peers, I enhanced my cross-cultural communication and teamwork skills. This experience significantly enriched my academic and global perspective.

Work Experience

R.D Service (Internship)

Italy

ELECTRONIC TECHNICIAN

Feb. 2016-Apr. 2016, Feb. 2018-Apr. 2018

- Electronic device settings
- Communication with customers

BidPremiumSRL(Internship)

Udine, Italy

SOFTWARE/AI ENGINEER

Apr. 2021 - Jun. 2021

- Development of a software aimed at the recognition of defects in production
- Development of a software capable of transforming the information contained in a paper sheet into useful data

BidPremiumSRL(Part Time)

Udine, Italy

SOFTWARE ENGINEER / COMPUTER VISION AND AI ENGINEER

Jun. 2021 - Apr. 2022

- Improvement of the software previously developed aimed at the recognition of defects in production
- Implemented API server for card grading
- Building Datasets for AI Projects

Skills

Programming Language	Python, Java, C++, R, Javascript, Scheme, PHP, MySQL, PostgreSQL, HTML, Node.js, LaTeX
Technical Skill	Bash, Zsh, SSH, LaTeX, Markdown, Jupyter Notebook, RegEx, debugging (GUI, gdb), TDD, OOP
Framework and Libraries	Pytorch, AWS, Tensorflow, OpenCV, NumPy, Matplotlib, Sklearn, Flask API, Bootstrap, React(Basic), Django(Basic)
Software	Git, GitHub, Linux/Windows/macOS, Jupyter Notebook/Lab, VS Code, Pycharm, RStudio, PostgreSQL, Microsoft Word/Powerpoint/Excel, TexStudio, OverLeaf
Languages	Italian, English

Projects

LEXOInc. (<http://lexoinc.altervista.org/>)

Udine, Italy

CO-FOUNDER

2017

- Developed a website for companies and individuals to simplify the job search
- Acquired knowledge in website foundation, including PHP, Databases management and Security
- Development of a modern and attractive graphic interface, including well-known framework like Bootstrap
- Presentation of the project as a final exam in the IT course

Fatal Police shootings in the USA

Udine, Italy

DATA SCIENCE PROJECT

Feb. 2020, Jun. 2020

- Data Analysis with R on RStudio and search of correlation between data
- Markdown with R and final Presentation with RStudio, drawing some graphs to show the behaviour of data during the years
- Performed a data exploration on a Dataset found on Kaggle
- Choice of a stimulating and at the same time useful project

Twitter Data Analysis

Udine, Italy

SOCIAL COMPUTING PROJECT

Feb. 2021, Jun. 2021

- Analysis and tracking of some Twitter Profiles given the usernames
- Understanding Social Network analysis with Python and the library Tweepy in order to obtain behaviours of these profiles and track measurements and distance between them
- Building a network between them and analyse some metrics like HITS, BETWEENNESS CENTRALITY, CLOSENESS CENTRALITY, PAGERANK, DEGREE CENTRALITY...
- Search of correlation between profiles and calculate Pearson and Kendall Correlation's indexes

Crowdsourcing and Data analysis using Amazon AWS and Amazon Mechanical Turk

Udine, Italy

SOCIAL COMPUTING PROJECT

Feb. 2021, Jun. 2021

- Design and development of an Amazon Mechanical Turk Task
- Public relation task in spreading the task in our social community trying to obtain as much data as possible
- Analysis of the data obtained and writing of conclusions on possible improvements for the company

Design, Development and Analysis of a hospital database

Udine, Italy

DATABASE PROJECT

Feb. 2021, Jun. 2021

- Customer requirement analysis
- Development of a database with PostgreSQL
- Populating the database with automatic test data
- Performed a data exploration on the populated database and obtained some behaviours about the structure just builded

Claude 3s Performance on the ConceptARC Benchmark: An Analogical Reasoning Assessment

Padua, Italy

COGNITIVE BEHAVIOURAL AND SOCIAL DATA PROJECT

2024

- State of the art paper reading
- Development of a Notebook capable to dynamically interact with Claude 3 API
- Automatic retrieval of results

Wine Price prediction in Italy

Padua, Italy

TIME SERIES ANALYSIS

2024

- Data Retrieval from ISTAT and up-to-date portals
- Development of a strategy based on the available data
- Price of the wine prediction using different models (ARIMA, Logistic Regression, Holt's...)
- Analysis of the results and possible use of them in real world contexts

Honors & Awards

INTERNATIONAL

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| 2016 | MAIGNANI , Honor Award for excellent marks during the year | Udine, Italy |
| 2017 | MAIGNANI , Honor Award for excellent marks during the year | Udine, Italy |
| 2018 | MAIGNANI , Honor Award for excellent marks during the year | Udine, Italy |
| 2019 | UNUD , Scholarship winner thanks to Academic Performance | Udine, Italy |
| 2020 | UNUD , Scholarship winner thanks to Academic Performance | Udine, Italy |

Certification

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| 2017 | B2 Language Assessment , Cambridge English | Italy |
| 2021 | Advanced Computer Vision with TensorFlow , DeepLearning.AI | Coursera |
| 2021 | Convolutional Neural Networks in TensorFlow , DeepLearning.AI | Coursera |
| 2021 | Custom Models, Layers, and Loss Functions with TensorFlow , DeepLearning.AI | Coursera |
| 2021 | Custom and Distributed Training with TensorFlow , DeepLearning.AI | Coursera |
| 2021 | Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning , DeepLearning.AI | Coursera |
| 2022 | Intro to Deep Learning with PyTorch , Udacity | Udacity |