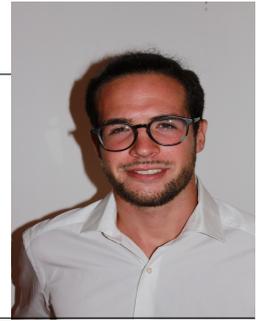


# Giorgio VISANI — Curriculum Vitae

## PERSONAL

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BORN: Faenza, Italy | 11 Dicembre 1993  
RESIDENCE: Piazza della Rocca 9, Faenza (RA), Italy  
PHONE: +39 333 1018612  
ACADEMIC EMAIL: [giorgio.visani@unibo.com](mailto:giorgio.visani@unibo.com)



## FEW WORDS ABOUT ME

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Thanks to my studies in Statistics Department, I have a solid math and statistical background. I am currently in the fourth and last year of PhD in Data-Science and Computation, collaborating with Crif SpA and the AI group of the Engineering Department, Università di Bologna. My supervisor is prof. Federico Chesani. My main line of work focuses on EXPLAINABILITY FOR MACHINE LEARNING MODELS, in order to make them compliant with the regulatory requirements. In addition, I operate on SYNTHETIC DATA: how to generate them through Deep Generative Models and evaluate their goodness. Eventually, I also work on CAUSALITY: study and infer the causal structure between variables in the dataset. This topic can help in building more stable and reliable Machine Learning models, taking into account the true causality underlying the data.

## INVITED SPEAKER

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- SEPTEMBER 2022 | Invited Speaker at the "Business, Industry & Finance" Stream at the [RSS Conference 2022, Aberdeen \(Scotland\)](#)  
Talk Title: Reliable Explanations for Credit Scoring Models
- JUNE 2022 | Invited Keynote Speaker at the [Tailor Summer School 2022, Barcellona](#)  
Talk Title: Explainable Machine Learning in Finance, from a regulatory perspective towards reliable explanations

## SELECTED PUBLICATIONS & CONFERENCES

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- APRIL 2022 | Paper on Synthetic Data Evaluation, under revision for [DSAA 2022](#), draft version on ArXiv  
Title: [Enabling Synthetic Data adoption in regulated domains](#)
- AUGUST 2020 | Paper on MultiClass Classification Metrics, draft version freely available on ArXiv  
Title: [Metrics for Multi-Class Classification: an Overview](#)
- JUNE 2020 | Paper presented at [CIKM2020 - AIMLAI Workshop](#), draft version freely available on ArXiv  
Title: [OptiLIME: Optimized LIME Explanations for Diagnostic Computer Algorithms](#)
- JANUARY 2020 | Paper published in [JORS](#), draft version freely available on ArXiv  
Title: [Statistical stability indices for LIME: obtaining reliable explanations for Machine Learning models](#)
- AUGUST 2019 | Credit Scoring Conference XVII, EDINBURGH  
Presented the paper: [Explanations of Machine Learning predictions: a mandatory step for its application to Operational Processes](#)

## SCHOOLS, COURSES & CERTIFICATIONS

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- JUNE 2020 | [ML for Non-Matrix Data](#): Summer School on the ML Frontiers, in LECCO (TELE-PRESENCE)  
Topics: ML for Graphs, Reinforcement Learning, Causal Inference
- JUNE 2020 | [RegML2020](#): Summer School on Regularization Methods, in GENOVA (TELE-PRESENCE)  
Topics: Regularization Theory from different perspectives
- SEPTEMBER 2019 | [SOSC2019](#): Summer School on Open Science, in BOLOGNA  
Topics: Tools and Infrastructures for developing Machine\Deep Learning Models
- SEPTEMBER 2018 | [DSS2019](#): Summer School on Data Science, in PISA  
Topics: Data Analysis on various types of data (Complex Systems, Graphs, Networks etc.)  
Special focus on Machine Learning Explainability
- MAY 2018 | [CINECA Summer School on Parallel Computing](#) in BOLOGNA  
Topics: Different Paradigms of Parallel computation, applied on Cineca's High Performance Computers (HPC)

## EDUCATION

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MARCH 2023 DECEMBER 2022	I will be Visiting Researcher <i>at</i> UNIVERSITY OF SYDNEY, <i>School of Mathematics and Statistics</i> Working on Monte-Carlo methods, under the supervision of Dr. Clara Grazian
DECEMBER 2021 SEPTEMBER 2021	Visiting Researcher <i>at</i> UNIVERSITÈ LIBRE DE BRUXELLES Worked on Causal Inference and Causality in Machine Learning, under the supervision of prof. Gianluca Bontempi
ONGOING NOVEMBER 2018	PhD Student in Data-Science and Computation, UNIVERSITÀ DI BOLOGNA PhD scholarship in association with CRIF (Credit Risk Prediction) to produce explanations of Black-Box models
FEBRUARY 2016 JULY 2016	Erasmus Program <i>at</i> UNIVERSITY OF WARSAW Courses taken: Business English C1 level, Econometrics, Mathematics. Spoken Language: English
SEPTEMBER 2015 MARCH 2018	Master Degree in Statistics, at UNIVERSITÀ DI BOLOGNA Graduated with 110/110 cum Laude. Thesis: 'Selection of typical days for Combined Heat and Power (CHP) systems optimization, applied analysis in the Northern Italy district'.
SEPTEMBER 2012 JUNE 2015	Bachelor Degree in Statistics, at UNIVERSITÀ DI BOLOGNA Graduated with 110/110 cum Laude. Thesis: 'Matching statistico e sue applicazioni'.

## TUTOR AND LECTURER EXPERIENCES

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ONGOING JANUARY 2021	Lecturer for <a href="#">DEEP LEARNING ITALIA</a> <i>Held e-learning Courses and Lecturer for Deep Learning Master, Experis Accademy</i> Topics: ML Explanations (LIME, SHAP), Advanced ML (Random Forest, Gradient Boosting, Kernels, SVM)
FEBRUARY 2021 SEPTEMBER 2020	Tutor for UNIVERSITÀ DI BOLOGNA, Bologna For the Course " <a href="#">Modern Statistics and Big Data Analytics</a> ", held by prof <a href="#">Hennig</a>

## REVIEWER

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ONGOING	Reviewer for <a href="#">JORS</a>
ONGOING	Reviewer for <a href="#">THE COMPUTER JOURNAL</a>

## WORKING EXPERIENCES

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ONGOING NOVEMBER 2018	Research Scientist at CRIF, Bologna <i>Explanations for Machine Learning Models</i> Credit Risk Prediction using Machine Learning and Statistical Models. Research on providing reasons behind models' decisions. Cooperation with CRIF in the context of PhD.
MARCH 2020 JUNE 2020	Outside Contractor for UNIVERSITÀ DI BOLOGNA, Bologna <i>Analysis of Placement Test Data for University Admission</i> Prediction of university drop-out, using TOLC data. Employed ML Models (Gradient Boosting, Random Forest), Explainable Techniques (SHAP, H-Statistic, PDP, ALE Plots), Advanced Feature Selection (Boruta), Parametric models (Quantile Regression, Beta Regression, 0-1 inflated version).
MAY 2018 SEPTEMBER 2018	Outside Contractor for UNIVERSITÀ DI BOLOGNA, Bologna <i>Analysis of Placement Test Data for University Admission</i> Prediction of university drop-out, using TOLC data. Employed Logistic, Lasso, Quantile Regression.
SEPTEMBER 2017 MARCH 2018	Outside Contractor for OPTIT S.R.L., Bologna <i>Data Scientist and Statistical Consultant</i> Data Clustering of Energy data, in the context of optimization. Compared different algorithms (K-Means, PAM, EM Algorithm, DBScan). This represented also the core of the Master Thesis.
FEBRUARY 2017 MAY 2017	Tutor for UNIVERSITÀ DI BOLOGNA, Bologna <i>Tutor in Statistics, at 'Oriani' High School, Faenza</i> Small project of 20 hours, at the Istituto Tecnico Oriani in Faenza. The project has been funded by Università di Bologna.

## INFORMATICS & SOFTWARE

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## HOBBIES & INTERESTS

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Coding, Machine Learning, Statistical Learning  
Skying, Cycling, Running, Swimming

I hereby authorise the usage of my personal data, following the art. 13 del D.Lgs. 196/2003

Bologna, 14/05/2022

A handwritten signature in black ink, appearing to read 'Giorgio Menni'.