Valentina Ghidini

PHD STUDENT · STATISTICS

Bocconi University, Milan

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Education

Bocconi University *Milan, Italy*

PHD FELLOW - STATISTICS *2019 - present*

University of Turin *Turin, Italy*

MSC, STOCHASTICS AND DATA SCIENCE *2017 - 2019*
- Thesis: Quantitative and Ontology-Based eXplainable Artificial Intelligence techniques for Computer Vision
- Grade: 110/110 summa cum laude, with special mention for the academic curriculum

University of Milano-Bicocca *Milan, Italy*

BSC, STATISTICS AND INFORMATION MANAGEMENT *2014 - 2017*
- Thesis: Analysis of the scientific network in PubMed using Graph Databases
- Grade: 110/110 summa cum laude

Research Experience

ISI Foundation *Turin, Italy*

RESEARCH INTERNSHIP - DEEP LEARNING & XAI *Feb 2019 - Sep 2019*
- Application of eXplainable Artificial Intelligence to Computer Vision and Convolutional Neural Networks

CRISP *Milan, Italy*

RESEARCH INTERNSHIP - DATA SCIENCE *Sep 2016 - Mar 2017*
- Implementation of a Graph Database, exploiting NLP techniques, data & graph analysis

Publications

PUBLISHED

Ghidini, V., Perotti A., Schifanella R.. 2019. Quantitative and Ontology-Based Comparison of Explanations for Image Classification. Machine Learning, Optimization, and Data Science. LOD 2019. Lecture Notes in Computer Science, vol 11943. Springer

SUBMITTED

Post-hoc Explanations through Probabilistic Sensitivity Measures, joint work with E. Borgonovo et al. (2021+)

IN PREP

Bayesian nonparametric clustering of multiplex networks, joint work with D. Durante, O. Papaspiliopoulos.

Covariance structure of weak learners in boosting, joint work with D. Durante, O. Papaspiliopoulos.

Linear models with assumptions-free residuals: a Bayesian nonparametric approach, joint work with F. Ascolani.

Dependence-free variable importance measures using graph structures, joint work with E. Borgonovo, C. Rudin.

Presentations

CONFERENCES

2021 INFORMS Annual Meeting
> October 2021
> Title: *Post-hoc Explanations through Probabilistic Sensitivity Measures*
> joint work with E. Borgonovo et al.
> Anaheim, California (online)

OTHER

CEST-UCL seminar series on *Responsible Modelling in Uncertain Times.*
> November 2021
> Title: *What assumptions do we make when using black box predictive models?*
> Panel discussion with C. Rudin, P. Beneventano.
> (online)

Teaching Experience

Fall 2021	**Statistics - course 30001, Mathematics - course 30400**, Teaching Assistant	*Bocconi University*
Spring 2021	**Statistics**, Teaching Assistant	*University of Bergamo*
Fall 2020	**Statistics - course 30001**, Teaching Assistant	*Bocconi University*
Spring 2015	**Mathematics**, Tutor in a middle school	*Istituto Comprensivo di Basiano*

Certifications

Natural Language Processing with Classification and Vector Spaces (2021)
> Institute: Coursera
> Certificate number: GAJZ9GRHKN8D

PhD Beat - Bocconi Excellence in Advanced Teaching (2021)
> Institute: Bocconi University

Deep Learning Specialization (2019)
> Courses: Neural Networks and Deep Learning, Hyperparameters tuning, Sequence models, Convolutional Neural Networks.
> Institute: Coursera
> Certificate number: 9C4VZEV8YTW7

SAS Certified Base Programmer for SAS 9 (2017)
> Institute: SAS Institute
> Certificate number: BP069923v9

SAS Predictive Modeler Using SAS Miner 13 (2017)
> Institute: SAS Institute
> Certificate number: PMEM001296v13

First Certificate in English (FCE) (2013)
> Institute: Cambridge Institute

Others

PROGRAMMING LANGUAGES

R, python, SAS: excellent

SQL, cypher: intermediate

C, C++, MATLAB: basics

Languages

Italian: native

English: fluent

Professional Memberships

SIS - Societá Italiana di Statistica
IMS - Institute of Mathematical Statistics