NICCOLO' DALMASSO

PHD CANDIDATE IN STATISTICS & DATA SCIENCE @ CARNEGIE MELLON UNIVERSITY

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EMPLOYMENT

AI & Machine Learning Research Associate

J.P. Morgan AI Research

June 2020 – August 2020 Remote Working

Carried out independent research and built a `PyTorch` framework for automatic deep neural network pruning for concurrent optimization of multiple non-standard non-differentiable objectives.

AI Research Intern

IBM Research

May 2018 – August 2018 Yorktown Heights, NY

Carried out independent research and built a `PyTorch` framework for automatic deep neural network pruning for concurrent optimization of multiple non-standard non-differentiable objectives.

Game Analyst - Data Science Team

Zynga (NaturalMotion LTD)

October 2014 - June 2016 London, UK

End-to-end data analytics for live and in development mobile gaming titles, with main focus Dawn of Titans ($\sim 10^4$ player producing $\sim 10^7$ tracking data on a daily basis).

SELECTED PUBLICATIONS

Journals

- **Dalmasso, Niccolò**, Taylor Pospisil, Ann B. Lee, Rafael Izbicki, Peter E. Freeman, and Alex I. Malz (2020). "*Conditional Density Estimation Tools in Python and R With Applications To Photometric Redshifts and Likelihood-Free Cosmological Inference*". In: Astronomy and Computing.
- Feeney, Stephen M., Daniel J. Mortlock, and **Dalmasso, Niccolò** (2018). "*Clarifying the Hubble constant tension with a Bayesian hierarchical model of the local distance ladder*". In: Monthly Notice of the Royal Statistical Society 476, pp. 3861–3882.

Peer-Reviewed Conferences and Workshops

- **Dalmasso, Niccolò**, Rafael Izbicki, and Ann B. Lee (2020). "*Confidence Sets and Hypothesis Testing in a Likelihood-Free Inference Setting*". In: *International Conference in Machine Learning (ICML)*.
- **Dalmasso, Niccolò**, Ann B. Lee, Rafael Izbicki, Taylor Pospisil, Ilmun Kim, and Chieh-An Lin (2020). "*Validation of Approximate Likelihood Models for Computationally Intensive Simulations*". In: *International Conference on Artificial Intelligence and Statistics (AISTATS)*.
- **Dalmasso, Niccolò**, Robin Mejia, Jordan Rodu, Megan Price, and Jared Murray (2019). "Feature Engineering for Entity Resolution with Arabic Names: Improving Estimates of Casualties in the Syrian Civil War". In: *NeurIPS 2019 Workshop on AI for HADR (**Spotlight Talk**)*.
- **Dalmasso*, Niccolò**, Alex Reinhart*, and Shamindra Shrotriya* (2019). "Predictive Inference of a Wildfire Risk Pipeline in the United States". In: *NeurIPS 2019 Tackling Climate Change with Machine Learning Workshop (**Spotlight Talk**)*.

CV and references available upon request – Last updated June 1, 2020

EDUCATION

Ph.D. in Statistics & Data Science

Carnegie Mellon University

Aug 2016 – May 2021 (Exp.)

GPA: 4.1/4.0, Advisor: Ann B. Lee

M.Sc. in Statistics

Imperial College London

Sept 2013 – Sept 2014

Final Grade: *Distinction*

B.Sc. in Mathematics

University of Study of Turin, Italy

Sept 2010 – July 2013

GPA: 3.8/4.0

CODING SKILLS

Proficient

- Python: `numpy`, `pandas`, `sklearn`, `scipy`, `jupyter`, `pyTorch`, `matplotlib`
- R: `dplyr`, `tidyverse`, `RStan`, `ggplot`
- Author/Contributor of 6 Python and 6 R publicly available packages

Everyday Workflow Bash, Git, LaTeX

Work Experience

- *Databases*: MySQL, Vertica SQL, PostgreSQL, PostGIS
- *Visualization*: Django + Javascript, Rshiny

Familiarity C++, Matlab, Julia, HTML

AWARDS

2019 Statistics & Data Science Teaching Assistant of the Year
2017 Fall Citadel Data Open at Carnegie Mellon Team winner. ($20,000 prize)
2012 "Alfaclass Update" Mathematics Team Competition - 1^{st} prize ($6,500 prize)
2010-2013 Academic Scholarship, Scuola of Studi Superiori, University of Turin
2010-2013 Department Excellence, Mathematics, University of Turin

HOBBIES

Golf (5 hcp.) Soccer Poker