# Federico Pavone

PhD student



### Education

- 2019 PhD in Statistics, Università Bocconi, Milano.
- 2016 2019 **MSc in Mathematical Engineering**, *Politecnico di Milano*, Milano, *cum laude*. Major in Applied Statistics.
- 2013 2016 **BSc in Mathematical Engineering**, *Politecnico di Milano*, Milano, *cum laude*.

## Work Experience

- 2021 2022 **Teaching Assitant**, Università Bocconi, Milano.
  - Data Analysis, Statistics, Principles of Business Analytics, Bayesian Statistical Methods, Applied Stochastic Processes, Machine Learning, Metodi Quantitativi per la Finanza.
- 2020 2021 **Teaching Assistant**, Università Bocconi, Milano.
  - Data Analysis, Principles of Business Analytics, Machine Learning.
- 2018 2019 **Research Assistant**, *Probabilistic Machine Learning Group*, Aalto University, Helsinki. Internship in the PML group at Aalto University under supervision of Prof. Aki Vehtari.

#### **Publications**

- F. Pavone, J. Piironen, P.-C. Bürkner, and A. Vehtari, "Using reference models in variable selection," *Computational Statistics*, pp. 1–23, 2022.
- F. Pavone, "Bayesian reference model in feature selection problems," Master thesis, 2019.

#### Conferences and Seminars

22/09/2020 Università Cattolica, Milano, Using reference models in variable selection, Invited talk.

#### Projects

- 2017 2018 C++/R package for density function estimation, Politecnico di Milano, Milano.
  - Optimized R package in C++ to perform density function estimation through smoothing splines based on Machalova, Hron and Monti (2016). Project carried out by a three-person team. https://github.com/fpavone/pacs\_spline\_density
- 2017 2018 Bayesian model for AVIS donations, Politecnico di Milano, Milano.
  - AVIS is the main italian institute for blood donations. The goal was to build a bayesian model for the gap times between different donations of different donors. Software used was R with its interface to Stan. Project carried out by a two-person team.
  - 2017 **Spacescope**, *Politecnico di Milano*, Milano.
    - Statistical analysis of a NASA dataset about stars and lightcurves. The goal was identifying stars hosting exoplanets using multivaried and functional data statistics tools in R. Project carried out by a five-person team.

# Languages

Computer skills

Italian Native proficiency

English Professional working proficiency

C++, R, Stan, Python