Francesco Denti

via Risorgimento 27
20060 Mediglia (MI)
✆ + 331 21 00 484
✉ f.denti2@campus.unimib.it
⌂ fradenti.github.io
in linkedin.com/in/Francesco-Denti

I am currently a Postdoctoral Scholar at the University of California - Irvine. My primary research interests are Bayesian statistics, Bayesian Nonparametrics and Data Analysis.

Education

Nov 16–Feb 20	**Joint Ph.D. degree in Statistics**, *awarded with honors*, University of Milan-Bicocca and Università della Svizzera italiana. Thesis: "Bayesian mixtures for large scale inference" Advisors: Antonietta MIRA, Michele GUINDANI, Fulvia MECATTI
Sep 14–Jul 16	**Master's Degree in Statistics and Economics**, *110 cum laude*, University of Milan-Bicocca. Thesis: "Modeling of extreme values using a Bayesian nonparametric approach to estimation of Poisson processes". Advisor: Andrea ONGARO. GPA: 30/30 , 12/13 distinctions.
Sep 11– Jul 14	**Bachelor's Degree in Statistics and Economics** , *110 cum laude*, University of Milan-Bicocca. Thesis: "Statistical modeling of extreme values". Advisor: Piero QUATTO. GPA: 29.7/30.
Sep 06– Jul 11	**Liceo Scientifico Sant'Ambrogio**, *Final grade: 97/100*, Milan.

Visiting Periods

Nov 18	**Scuola Internazionale Superiore di Studi Avanzati - SISSA, Trieste**. One week visiting period, invited by Prof. Alessandro Laio
Jan 18 – Jun 18 Jan 19 – Jun 19 Aug 19 – Sep 19	**University of California, Irvine**, *Visiting Research Scholar*. Conducted research under the supervision of Professor Michele Guindani. Attended the course of Bayesian Statistics and Causal Inference.

Working Experience

Oct 19–Mar 20	**Freelence Data Scientist for DCG srl**, *Milan*, Member of the Research Team.

Teaching

Sep 19 – Jan 20	**Teaching Assistant**, *MSc course in Advanced Statistics*, USI - Università della Svizzera italiana, (Eng).
Sep 18 – Jan 19	**Teaching Assistant**, *MSc course in Statistics*, USI - Università della Svizzera italiana, (Eng).
Sep 17 – Jun 18	**Teaching Assistant**, *BSc course in Statistics*, Bocconi University, (Ita).
Sep 17	**Principal Instructor**, *MSc precourse in Statistics*, Cattolica University, (Eng).
Nov 15 – Nov 17	**Teaching Assistant and Academic Tutor**, *BSc course in Probability (9 ECTS)* - Cultore della materia *for the years 2015-2020*, University of Milan-Bicocca, (Ita).
Oct 16 – Dec 17	**Academic Tutor**, *MSc course in Bayesian Statistics (6 ECTS)*, University of Milan-Bicocca, (Ita).

Scholarships, Awards and Certificates

Jan 20	**Travel Support**, *Bayes Comp 2020 - University of Florida*. Selected as recipient of Travel Support funds for a Contributed Talk.
Jun 19	**Travel Support**, *BNP 12 - University of Oxford*. Selected as recipient of Travel Support funds for a Poster Presentation.
Nov 16–Now	**Ph.D. Scholarship**, *University of Milan-Bicocca*, Ph.D. Program in Statistical Sciences. Awarded with a merit-based scholarship.
Sep 2017	**Young CLADAG Competition**, *Politecnico di Milano*. Data science competition. Third best team in terms of algorithm predictive accuracy. Awarded with a grant offered by Fondazione CARIPLO. Presentation available here.
Jun 2017	**Stats Under the Stars 3**, *Florence*. Data science competition. Member of one of the four (out of 24) winning teams. Final Report available here.
Apr 2014	**SAS Base Programming certification**, *Score 95/100*.

Dec 2013   **SAS Enterprise Miner certification**, *Score 95/100.*

May 2010   **ECDL certification**.

Computer Programming

R, **Rcpp, SAS, Knime, Gretl, SPSS, Stata, Open Office, Microsoft Office, LATEX, C++, Python, SQL, OpenBUGS, Stan, MCMC**.

Publications and Projects

Articles in Referred Journals

Oct 2020   **Allegra, M., Facco, E., Denti, F., Laio, A., and Mira, A.**, *"Data segmentation based on the local intrinsic dimension"*, Accepted in Scientific Reports.

Jun 2020   **F. Denti, M. Guindani, F. Leisen, A. Lioji, W. D. Wadsworth, M. Vannucci**, *"Two-group Poisson-Dirichlet mixtures for multiple testing"*, Biometrics.

Oct 2018   **M. Petazzoni, E. De Giacinto, D. Troiano, F. Denti, M. Buiatti**, *"Computed Tomographic Trochlear Depth Measurement in Normal Dogs"* , Journal of Veterinary and Comparative Orthopaedics and Traumatology.

Jun 2016   **R. Menicagli, F. Denti.**, *"First results of an in vitro study on the effects of green tea on the defensive layer of the oral cavity"*, International Journal of Current Research.

Submitted Papers

2020+   **Denti, F., Camerlenghi, F., Guindani, M., and Mira A.**, *"A Common Atom Model for the Bayesian Nonparametric Analysis of Nested Data"*, Invited revision submitted, Submitted.

2020+   **Santos-Fernandez, E., Denti, F., Mengersen, K., and Mira A.**, *"The role of intrinsic dimension in high-resolution player tracking data – Insights in basketball"*, Submitted.

2020+   **Denti, F., Cappozzo, A., and Greselin, F.**, *"A Two-Stage Bayesian Nonparametric Model for Novelty Detection with Robust Prior Information"*, Submitted.

2020+   **Denti, F., Peluso, S., Guindani, M., and Mira, A.**, *"Multiple hypothesis screening using non-local mixtures"*, Submitted.

Book Chapters and Proceedings

Oct 2020   **F. Denti, A. Cappozzo, and F. Greselin**, *"Bayesian nonparametric adaptive classification with robust prior information"*, In A. Pollice, N. Salvati, and F. Schirripa Spagnolo (a cura di), Book of Short Papers SIS 2020 (pp. 655-660). Pearson.

Dec 2018   **A. Caponera, F. Denti, T. Rigon, A. Sottosanti, and A.E. Gelfand.**, *"Hierarchical Spatio-Temporal Modeling of Resting State fMRI Data"*, In Studies in Neural Data Science (Canale, A., Durante, D., Paci, L., Scarpa, B., editors).

Other Projects

Projects   Here you can find a collection of my best academic projects, along with my theses.

Posters and Talks

Nov 2020   **UCI Fall Seminar Series**, *Zoom Seminar.*
Talk: Bayesian Sparse Regression via Cluster Shrinkage Parameters

Aug 2020   **MBC^2 - Models and Learning for Clustering and Classification**, *Virtual Conference.*
Video Poster: Bayesian Nonparametric Functional Novelty Detector

Jul 2020   **Young-ISA Twitter Poster Conference (#YISAPoster2020)**, *Twitter, The Internet.*
Poster: A Two-Stage Bayesian Nonparametric Model for Novelty Detection with Robust Prior Information

Jan 2020   **BayesComp2020**, *University of Florida, Gainesville.*
Talk: Bayesian nonparametric dimensionality reduction via estimation of data intrinsic dimensions

Jul 2019   **SIB 2019 - International Biometric Society Regions**, *Naples, IT.*
Talk: Modeling Human Microbiome Data via Latent Nested Nonparametric Priors

Jul 2019	**BNP 12 - Bayesian Nonparametrics**, *University of Oxford, UK.* Poster: Modeling Human Microbiome Data via Latent Nested Nonparametric Priors

Courses, Summer Schools, Workshops and Seminars

Aug 2020	**2020 NISS Writing Workshop for Junior Researchers**, *Zoom Workshop, The Internet.*
Jan 2020	**Bayesian Nonparametrics for complex data**, *University of Padua, Padua.*
Nov 2019	**NET2019 - Network Models in Statistics, Economics and Social Sciences**, *University Cattolica del Sacro Cuore and University of Milan - Bicocca, Milan.*
Jul 2019	**FoMICS-DADSi One-Day School on Approximate Bayesian Computation - ABC**, *Università della Svizzera italiana (USI), Lugano.*
Jun 2019	**SMI 19 - Statistical Methods in Imaging**, *University of California - Irvine.*
Sep 2018	**FoMICS-DADSi Summer School on Data Assimilation**, *Università della Svizzera italiana (USI), Lugano.*
Sep 2018	**MPS: The Mathematics of Subjective Probability**, *three days meeting at University of Milan - Bicocca.*
Jul 2018	**LMS Invited Lecture Series and CRISM Summer School in Computational Statistics 2018**, *University of Warwick.*
Jun 2018	**ISBA World Meeting**, *University of Edimburgh.*
Jan-Jun 2018 Jan-Jun 2019 Feb-Jun 2020	**Cycle of Winter and Spring quarters Seminars at UCI, Space-Time Modeling Group, Bayesian Journal Club**, *University of California - Irvine.*
Jun 2017	**Start up Research Workshop**, *University of Siena.*
May 2017	**International Summer School on Classification and Data Analysis**, *University of Bologna, Rimini.*
Jan 2017	**Understanding Bayesian Networks with Examples in R**, *University Cattolica del Sacro Cuore.*
Jan–Apr 16	**Statistical Learning Online Course**, *Stanford University.* Certification of accomplishment.
Apr 2016	**Course in Analysis and Management of Geocoded Data**, *University of Milan-Bicocca.*

Service to Profession

Associate Editor	ISBA Bulletin - News of the World section
Referee for	Bayesian Analysis, Computational Statistics & Data Analysis

Other Activities and Affiliations

2019–Now	**Member of International Biometric Society (IBS-IR)** .
2018–Now	**Member of International Society for Bayesian Analysis (ISBA)**. Also member of j-ISBA, the junior branch of ISBA.
2017	**Member of Società Italiana di Statistica (SIS)**. Also member of y-SIS, the young group of the Italian Statistical Society.
2015–2020	**Student Representative**. Held the role of Ph.D. student represener in the CDD of my department. Held also the role of head boy in the CCD of my university course. Dealing at the same time with collegues and professors, this experience enhanced my collaborative and cooperative skills.
2006 - 2018	**Theater**, *Compagnia Me.te.or*, Mediglia. Amateur-level actor and director in the theater company of my town. This remarkable experience keeps improving me in various ways, starting from my communication skills. Leading a group of teenagers with a common purpose, I enhanced both time management and team-work sides.
2017 - 2018	**Volounteer Data Scientist**, *Heart in Data*, Milan. Heart in Data is a group of data professionists based in Milan (IT) offering their passion, dedication and talents for social good. Awarded the most innovative project at Open Days dell'Innovazione, Milan.

Languages

Italian	Native Speaker
English	Good Knowledge

Irvine, 29th October 2020