Rebecca Farina

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she/her

EDUCATION

Carnegie Mellon University, PhD in Statistics   Aug 2022 – May 2027 (Expected)
Advisor: Arun Kumar Kuchibhotla

University of Turin (Dept of Mathematics), MSc in Stochastics and Data Science   Sep 2020 – Jul 2022
Final Grade: 110/110 cum laude and honourable mention

Collegio Carlo Alberto, Master in Statistics and Applied Mathematics & Diploma in Economics   Sep 2018 – Sep 2022
Awarded with distinction

University of Turin (Dept of Mathematics), BSc in Mathematics for Finance and Insurance   Sep 2017 – Jul 2020
Final Grade: 110/110 cum laude

INTERESTS

conformal prediction; causal inference; missing data; uncertainty quantification; statistical machine learning; non- and semi-parametric theory; predictive modeling; bayesian methods

WORK EXPERIENCE

Roche, Intern in Statistical Modeling and Analytics   Summer 2025
Basel, Switzerland
Research topic: Hospital readmission prediction for chronic heart failure management.

Merck, Biostatistics Intern   Summer 2024
North Wales, PA
Research topic: Compiling and Evaluating More Efficient Statistical Testing Procedure for Non-Nested Model Selection for Survival Extrapolation and Event Projection.

RESEARCH EXPERIENCE

Farina R., Tchetgen Tchetgen, E.J., Kuchibhotla, A.K. (2026) *Automatic Debiased Machine Learning for complex Missing Data and Causal problems.* In preparation.

Farina R., Agrawal, A., Gabitto, M., Mena, G. (2026) *Biophysical Bayesian Inference for Neurodegenerative Dynamics: a Multi-Temporal Framework.* In preparation.

Farina R., Metelli, S., Mercier, F., Masson, S. (2025) *Dynamic Prediction for Hospital Readmission in Patients with Chronic Heart Failure.* arXiv preprint arXiv:2512.16463. Submitted.

Farina R., Tchetgen Tchetgen, E.J., Kuchibhotla, A.K. (2025) *Doubly Robust and Efficient Calibration of Prediction Sets for Censored Time-to-Event Outcomes.* arXiv preprint arXiv:2501.04615. Submitted.

COMPUTER SKILLS AND LANGUAGES

CODING: R, Python (NumPy, SciPy, Pandas, Scikit-learn, PyTorch, TensorFlow, Keras, Jax, NumPyro), Git, SQL

LANGUAGES: Italian (native), English (fluent)

ACADEMIC EXPERIENCE

Teaching Assistant at Carnegie Mellon University

36-410: Introduction to Probability Modeling	Spring 2026
36-490: Undergraduate Research	Fall 2025
36-672: Computational Statistical Methods in Life Sciences	Spring 2025
36-225: Introduction to Probability Theory	Fall 2024
36-219: Probability Theory and Random Processes	Spring 2024
36-235: Probability and Statistical Inference I	Fall 2023

36-226: Introduction to Statistical Inference | Spring 2023
36-235: Probability and Statistical Inference I | Fall 2022

HONORS & AWARDS

FDA-OCE-ASA Oncology Educational Fellowship — Sep 2024 – May 2025

Allievi Honors Program — 2018 – 2022
Scholarship, funded by Collegio Carlo Alberto

TALKS

International Conference on Statistics and Data Science (Contributed talk) — December 2025
Doubly Robust Prediction Sets for Missing Outcomes via AutoDML

Seminar at the Center for Causal Inference at University of Pennsylvania (Invited talk) — February 2025
Doubly Robust and Efficient Calibration of Prediction Sets for Censored Time-to-Event Outcomes

Seminar at the Causal Inference and Missing Data Group at INRIA (Invited talk) — February 2025
Doubly Robust and Efficient Calibration of Prediction Sets for Censored Time-to-Event Outcomes

International Conference on Statistics and Data Science (Contributed talk) — December 2024
Conformal Prediction for Survival Data.

CMStatistics (Invited talk, session 300) — December 2023
Conformal Prediction for Survival Data.

SERVICE

Organizer - CCA Alumni Workshop 2024 — December 2024

Volunteer - STATGEN 2024: Conference on Statistics in Genomics and Genetics — May 2024

President - Associazione Allievi della Fondazione Collegio Carlo Alberto — 2020 – 2022

Student representative - University of Turin — 2020 – 2022

Volunteer - Peer tutor for high school students (Mathematics, Computer Science, Physics, English) — 2017 – 2022