Rebecca Farina

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rebyfa98.github.io
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

RESEARCH INTERESTS

semiparametric inference; survival analysis; conformal prediction; machine learning; foundation models; missing data; uncertainty quantification; causal inference; Bayesian methods

WORK EXPERIENCE

Genentech, Intern - Frontier Research, AI for Drug Discovery — Summer 2026
South San Francisco, CA
Research topic: AI-powered survival analysis

Roche, Intern in Statistical Modeling and Analytics — Summer 2025
Basel, Switzerland
Research topic: Dynamic risk prediction for heart failure hospital readmission via Bayesian joint modeling of longitudinal biomarker trajectories and time-to-event outcomes.

Merck, Biostatistics Intern — Summer 2024
North Wales, PA
Research topic: Evaluation of efficient statistical testing procedures for non-nested model selection in survival extrapolation and event projection.

RESEARCH EXPERIENCE

Farina, R., Tchetgen Tchetgen, E.J., Kuchibhotla, A.K. (2026). *Doubly Robust and Efficient Calibration of Prediction Sets for Right-Censored Time-to-Event Outcomes.* https://doi.org/10.1093/biomet/asag036. *Biometrika, Volume 113, Issue 3, 2026, asag036.*

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

Farina, R., Wang, Y., Agrawal, A., Wang, J., Gabitto, M., Mena, G. (2026). *Multi-Trajectory Pseudotime inference via Permutation Factorizations.* bioRxiv:10.64898/2026.05.27.728207v1. Submitted.

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

COMPUTER SKILLS AND LANGUAGES

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

LANGUAGES: Italian (native), English (fluent)

ACADEMIC EXPERIENCE

Teaching Assistant at Carnegie Mellon University

36-220: Engineering Statistics and Quality Control	Fall 2026
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

SCHOLARSHIPS & AWARDS

IMS ICSDS Student Travel Award — Dec 2026

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

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

TALKS

CMStatistics (Invited talk, session CO319) — December 2026
Automatic debiased machine learning for complex missing data problems.

Statistical Learning and Data Science Conference (Iinvited talk, Session 08) — November 2026
Doubly Robust and Efficient Calibration of Prediction Sets for Right-Censored Time-to-Event Outcomes

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

Mentor - Lead The Future: Mentor for undergraduate and graduate students in Statistics and ML — Sep 2025 – Present

Organizer - CCA Alumni Workshop 2024 — Dec 2024

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

Volunteer - Women in Data Science Pittsburgh @CMU event — March 2023

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