

Elena Rivaroli

| | |
|----------------------------|--|
| Education | University of Trieste <i>Nov 2024 - current</i> <i>PhD in Applied Data Science and Artificial Intelligence</i> <ul style="list-style-type: none">PhD student at the Cancer Data Science Lab, supervised by Prof. Giulio Caravagna. |
| | University of Trieste <i>Sep 2022 - Oct 2024</i> <i>MSc in Data Science and Scientific Computing – Final Grade: 110/110 cum Laude</i> <ul style="list-style-type: none">Final thesis: "Bayesian Modeling for Cancer Subclonal Deconvolution in Multi-region and Longitudinal Data"Relevant courses: Computational Biology, Deep Learning, Unsupervised Learning, Probabilistic Machine Learning, Stochastic Modelling and Simulation |
| | Collegio Universitario Luciano Fonda <i>Sep 2022 - Sep 2024</i> <ul style="list-style-type: none">Two-years merit-based scholarship awarded by the Collegio Universitario Luciano Fonda in Trieste: an institution for the promotion of high-level formation born on the initiative of the University of Trieste and some of the most important scientific centers of the capital of Friuli Venezia Giulia. The scholarship covers accommodation and offers a wide range of interdisciplinary educational activities. |
| | University of Ferrara <i>Sep 2018 - Sep 2021</i> <i>BSc in in Electronic and Computer Engineering – Final Grade: 110/110 cum Laude</i> <ul style="list-style-type: none">Final thesis (in Italian): "Development of the User Interface of a software for the analysis of images from biophotonic microscopy". The thesis aimed to develop a user interface for software that analyzes images from a microscope, using the Electron framework to ensure a cross-platform application. |
| Teaching | Teaching Assistant for "Introduction to Computer Science" <i>Fall 2025</i> <ul style="list-style-type: none">Part of the bachelor's degree program in Artificial Intelligence and Data Analytics at the University of Trieste. |
| Research Experience | University of Trieste <i>Feb 2024 - Oct 2024</i> <i>Master Thesis Student</i> <i>Supervisor: Prof. Giulio Caravagna</i> <ul style="list-style-type: none">I completed my master's thesis at the Cancer Data Science Lab of the University of Trieste in the field of Computational Oncology. The goal of this thesis was to develop and apply a multidimensional Bayesian mixture model for the deconvolution of cancer subclones in multi-sample and longitudinal data. Subclonal deconvolution aims to identify and characterize the distinct subpopulations of cancer cells within a tumor.Usage of Pyro, a probabilistic programming language written in Python. |
| Conferences | RECOMB-CCB <i>Apr 2025</i> <ul style="list-style-type: none">Presented paper: "Model-based tumour subclonal deconvolution accounting for spatio-temporal sampling biases" (E. Rivaroli, E. Buscaroli, S. Milite, A. Casagrande, G. Caravagna) |
| | womENCourage <i>Sep 2019</i> <ul style="list-style-type: none">Participation Scholarship for the conference "ACM Celebration of Women in Computing: womENCourage 2019" organized by ACM-W Europe in Rome. Hackathon participation in the field of Artificial Intelligence. |
| Skills | Programming Languages. Python · C/C++ · R · SQL · Java Tools. Git/GitHub · Linux Bash · LATEX Languages. Italian (mother tongue) · English: working knowledge |