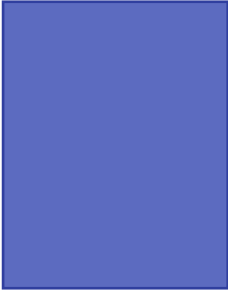



# Curriculum Vitae

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## Personal Information

Name Elena Pesce



## Presentation

I am a data enthusiast and the co-organiser of the R-Ladies Zurich chapter. Driven by my passion for innovation and in translating difficult concepts into simple terms, I'm also carrying several dissemination activities on machine learning and algorithmic biases.

## Work Experience

- 2024–Present **Data Science and Analytics Consultant in NatHaz, GIS and Data Science Team, XL CATLIN SERVICES SE Rappresentanza Generale per l'Italia**, Milan (Italy)  
Develop new services and tools, and provide technical support internal users and external clients.
- 2023–2024 **Business Analyst and Data Scientist in Advanced Analytics and Modelling**, Swiss Re, Zurich (Switzerland)  
Marine R&D initiative and actuarial modelling and application development.
- 2020–2023 **Business Analyst in Research Commercialisation Team**, Swiss Re, Zurich (Switzerland)
  - o Sustainable supply chain R&D initiative at the Swiss Re Institute.
  - o Technical Advisor of the Global Maritime Forum for the Poseidon Principles for Marine Insurance.
- 2017–2020 **PhD Researcher in Digital & Smart Analytics Team**, Swiss Re Corporate Solutions, Genoa (Italy)  
Marine Unit, working on marine logistics to develop new data-driven insights and analytics services.
- 2017 **Junior Data Scientist**, *Evo Pricing*, Turin (Italy)  
Core Team, working on dynamic pricing and optimisation.
- 2015 **Intern Data Analyst**, *Elah Dufour Spa*, Novi Ligure (Italy)

## Education, Teaching & Training

- 2017–2021 **PhD in Mathematical Methods for Data Analysis**, University of Genoa, Department of Mathematics, Genoa (Italy)  
**Thesis:** Model-based Design of Experiments for Large Dataset. *Supervisor:* Professor Eva Riccomagno.
  - o **Teaching Activities** in several Statistical Courses.
  - o **Scientific Dissemination Activities**, including a scientific laboratory held at the Science's Festival, Genoa.

- 2015–2017 **Master's Degree in Stochastics and Data Science**, *University of Turin, Department of Mathematics, Turin (Italy)*. *Grade: 110/110 cum Laude*
- 2012–2015 **Bachelor's Degree in Mathematics, Statistics and Data Management**, *University of Genoa, Department of Mathematics, Genoa (Italy)*. *Grade: 110/110 cum Laude*

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## Skills & Background Knowledge

### Technical skills

- o Excellent knowledge of R (including Shiny), Latex, Microsoft Office.
- o Good knowledge of SQL, Python, PySpark, Power BI, Javascript.
- o Basic knowledge of Foundry, Azure, SAS, Databricks, Spark, HTML, CSS.

### Personal skills

- o Sociable, proactive, curious, and very reliable team player, always ready to provide help and guidance.
- o I have a proven professional experience in coordination and management of projects and teams.
- o I am able to relate and communicate with people clearly and accurately.

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## Languages

Italian	<b>Native</b>
English	<b>Full professional proficiency</b>
Spanish	<b>Minimum professional proficiency</b>
German	<b>Elementary proficiency</b>

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## Publications

- o L. Deldossi, E. Pesce, C. Tommasi (2023): **Accounting for outliers in optimal subsampling methods**. . Statistical Papers, 1-17.
- o E. Pesce, F. Rapallo, E. Riccomagno, H.P. Wynn (2022). **Generation of all randomizations using circuits**. Annals of the Institute of Statistical Mathematics, 1-22.
- o E. Pesce, F. Porro, E. Riccomagno (2022). **Large datasets, bias and model-oriented optimal design of experiments**. Quality and Reliability Engineering International.
- o F. Carli, E. Pesce (2022). **Combination of Autoregressive Graphical Models and Time Series Bootstrap Methods for Marine Losses Forecast**. Submitted. (Preprint available upon request)
- o E. Pesce, E. Riccomagno, H.P. Wynn (2019). **Experimental Design Issues in Big Data. The Question of Bias**. In: Greselin F., Deldossi L., Bagnato L., Vichi M. (eds) Statistical Learning of Complex Data. CLADAG 2017. Studies in Classification, Data Analysis, and Knowledge Organization. Springer, Cham, pp. 193–201

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## Recent contributions at Conferences and Workshops

- o **Invited Speaker** - An interactive Shiny dashboard to quantify the carbon footprint of marine insurers' Hull and Machinery portfolios, Zurich R User Meetup on Re-Insurance and R, Zurich, Switzerland (July 2023).
- o **Invited Speaker** - Sustainable supply chains: Supporting the transition starting with marine decarbonisation, ETH MAS Sustainability Programme, Zurich, Switzerland (June 2023).

- o **Invited Speaker** - Optimal subset selection without outliers. Data Science, Statistics and Visualisation Conference, National Cheng Kung University, Tainan, Taiwan (June 2022)
- o **Invited Speaker** - Quantum Cities: A data-centric approach to sustainable cities, Nordic Data Science & Machine Learning Summit (May 2021)

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## Other Activities

- o Co-organiser of the R-Ladies Zurich.
- o Role of peer educator in prevention project about risk behaviours in adolescence for eight years.
- o I volunteered as entertainer and educator for about ten years at summer camps.

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## Interests

- o Football, Hip Hop, Lindy Hop, Swimming.
- o Table football, Ukulele.