STEFANO CROTTI

DATA SCIENCE PROBABILISTIC MODELLING SCIENTIFIC COMPUTING

PROFILE

I am a physicist with an **interdisciplinary education** in modelling of complex systems, experience with **scientific software** development, interested in **data** and **computational challenges**.

PROJECTS

Open source scientific software

- BeliefPropagation.jl: an algorithm for Bayesian inference on graphs
- IndexedGraphs.jl: a graph library based on sparse matrices

Stochastic dynamics on graphs

- Bayesian inference in epidemic spreading and neural dynamics
- Approximate methods for high-dimensional probability distributions

Neural signal classification

2019-2021

2022-2025

- Project work in an interdisciplinary team of 7
- Machine Learning classifier of mammal peripheral nerve signals
- Presented at the 10th International IEEE/EMBS Conference on Neural Engineering (NER)

EDUCATION

PhD in Statistical Physics Polytechnic University of Turin, Italy	2021-2025
MsC in Physics of Complex Systems Polytechnic University of Turin, Italy Grade: 110/110 cum laude Coursework: Algorithms for Optimization and Learning, Regression Analysis, Data Mining and Neural Networks, Stochastic Simulation Methods	2018-2020
Diploma in Innovation and Entrepreneurship <i>Alta Scuola Politecnica, Italy</i> A Multidisciplinary <u>international honour program</u>	2018-2021
BsC in Electronic Engineering <i>Polytechnic University of Turin, Italy</i> Grade: 110/110 cum laude Coursework: Algorithms and Programming, Information Theory, Signal Processing	2015-2018

CONTACT

- s.crotti@outlook.com
- Personal website
- Data Science portfolio
- GitHub
- in <u>Linkedin</u>

SKILLS

- Python, Julia, MATLAB
- pandas, scikit-learn, pytorch, torch-geometric, Flux.jl
- VSCode, Git, GitHub, Jupyter Notebook, Unix CLI
- Scientific communication (read my fairly mathematical blog)

LANGUAGES

- English (Professional)
- Italian (Mother tongue)
- French (Fluent)
- Spanish (Intermediate)