Stefano Ribes

Resume

Personal Data

citizenship:	Italian (EU)
email:	ribes.stefano@gmail.com
personal webpage:	https://ribesstefano.github.io/ (Google Scholar, Github, LinkedIn)

Education

2024 - Present — PhD Student in **AI-driven molecular engineering with applications in drug discovery** at Chalmers University, Sweden

2021 - June 2023 — Avg. grade: 4.3/5
Master's Degree in **Data Science and AI**
at Chalmers University or Technology, Gothenburg, Sweden
Thesis: "Machine Learning for Predicting Targeted Protein Degradation"

2016 - 2021 — Swedish Licentiate of Technology Degree in **Multi-LSTM Acceleration and CNN Fault Tolerance** at Chalmers University, Sweden
My research at Chalmers focused on two main topics:

- Design of FPGA hardware accelerators for deep learning models
- Fault tolerance analysis of sparse and compressed CNNs

The thesis can be read on the Chalmers.Research portal.

2015 - 2016 — Avg. grade: 4.25/5
Erasmus Exchange in **Embedded Electronic System Design**
at Chalmers University of Technology, Gothenburg, Sweden

2014 - 2016 — Final grade: 101/110
Master's Degree in **Computer Engineering, Embedded Systems**
at Polytechnic University of Turin, Turin, Italy

2011 - 2014 — Final grade: 96/110
Bachelor's Degree in **Computer Engineering**
at University of Modena and Reggio Emilia, Modena, Italy
Thesis: "*Study and Research on Responsive Technologies for Web Applications*"

Work Experience

June 2023 - 2024 — **Research Student** at AI Laboratory for Biomolecular Engineering, Chalmers University of Technology.
At the AIBE laboratory, I've continued my master thesis work on predicting protein-ligand activity using deep learning models, mainly language models based on the Hugging Face Transformers library.

Spring 2023 — **Master Thesis Intern** at AstraZeneca, Gothenburg, Sweden.
At AstraZeneca, I worked on my thesis titled "Machine Learning for Predicting Targeted Protein Degradation", focusing on designing diverse candidate deep learning models to predict PROTACs targeted protein degradation activity. The thesis can be read at this link.

2020 - 2022 — **Hardware Engineer** at Cobham Gaisler, Gothenburg, Sweden.
As a digital designer, I wrote and tested RTL modules and machine learning accelerators to be integrated in the RISC-V based NOEL-V processor.

Programming Skills and Tools

Strong Experience in:	PyTorch, PyTorch Lightning, Optuna, Pandas, Scikit-learn
High Performance Computing:	C, C++ , CUDA (CuPy and Numba), OpenCL
Version Control:	Proficient in Git for code versioning and collaboration in team projects
Scripting:	I'm confident scripting in both Linux and Windows environments

For more information, please visit my GitHub page: https://github.com/ribesstefano

Languages

English:	Fluent | IELTS 6.5 (2015)
Italian:	Mothertongue

Interests and Activities

Good sketching abilities and a fine eye for details,
I love cooking, especially experimenting new cuisines,
I play football as a goalkeeper and I particularly yearn for new challenges.