Lorenzo **Lupo**

14 rue Le Notre, 38100, Grenoble, France

+33 767837796 / +39 3334382541 | lorenzo.lupo@univ-grenoble-alpes.fr | lorelupo.github.io

Education

Jan. 2020-present **PhD in Computer Science** at Université Grenoble Alpes
Subject: Context-aware Neural Machine Translation.
Supervised by Laurent Besacier and Marco Dinarelli (contact them for **references**).

2016-2019 **M.S. in Management Engineering** (double degree) at Politecnico di Milano
Specialization: Social & Sustainable Innovation.
Grade: 110/110 cum laude.

2014-2016 **M.S. in Mathematical Engineering** (double degree) at École Centrale Paris
Grade: 3,53/4. Awarded excellence scholarship by the Association des Centraliens.

2012-2014 **B.S. in Mathematical Engineering** at Politecnico di Milano
Grade: 106/110.

Work Experience

Jan. 2021-Apr. 2022 **Teaching Assistant** at Université Grenoble Alpes
- Preparing and leading exercise classes on NLP at Polytech Grenoble (bachelor - L3 level).
- Preparing and leading exercise classes on NLP at ENSIMAG (master - M1 level).

Feb. 2021-Aug. 2021 **Supervisor of Master Thesis** at Université Grenoble Alpes
- Master thesis by Laura Alonzo-Canul, co-supervised with Marco Dinarelli.
- Title: Efficient Transformers for long context-aware neural machine translation

Feb. 2019 Jul. 2019 **Machine Learning Engineer Intern** at Indigo AI
- Researching and developing state-of-the-art natural language processing algorithms for Italian-speaking chatbots.

Aug. 2018 Nov. 2018 **Data Scientist** at DIG, Politecnico di Milano
- Applied various clustering techniques to unveil socio-economical similarities between 37 developing countries.
- Worked on the integration of my analysis into a broader research project for Eni S.p.A.
- Main tools: Numpy, pandas, scikit-learn.

Jun. 2016 Dec. 2016 **Data Scientist Intern** at European Investment Fund
- Designed various statistical tools to assess the economic and social impact of EIF's programmes for SMEs.
- Assessed two major European investment programs, COSME and InnovFin, reporting to European Commission.
- Built a VBA library in order to allow non-technical colleagues to easily repeat the same assessment in the years to come.

Publications

Ongoing **Encoding Sentence Position in Context-Aware Neural Machine Translation**
Authors: Lorenzo Lupo, Marco Dinarelli and Laurent Besacier.

Dec 2022 **Focused Concatenation for Context-Aware Neural Machine Translation**
Authors: Lorenzo Lupo, Marco Dinarelli and Laurent Besacier. Presented with an oral and poster presentation at the 7th Conference on Machine Translation, in Abu Dhabi, United Arab Emirates. Published in the proceedings.

May 2022 **Divide and Rule: Effective Pre-Training for Context-Aware Multi-Encoder Translation Models**
Authors: Lorenzo Lupo, Marco Dinarelli and Laurent Besacier. Presented with an oral and poster presentation at the 60th Annual Meeting of the Association for Computational Linguistics, in Dublin, Ireland. Published in the proceedings.

Jun. 2019 **Optimistic Policy Optimization via Multiple Importance Sampling**
Authors: Matteo Papini, Alberto Metelli, Lorenzo Lupo, Marcello Restelli. Presented with a poster (and orally by Matteo) at the 36th International Conference on Machine Learning, in Long Beach, California, US. Published in the proceedings.

Communications

07 Dec 2022 Focused Concatenation for Context-Aware Neural Machine Translation
Talk at the 7th Conference on Machine Translation; Abu Dhabi, United Arab Emirates.

05 Dec 2022 Towards Document-level Neural Machine Translation
Talk at the MIAI days 2022; Abu Dhabi, United Arab Emirates.

23 May 2022 Divide and Rule: Effective Context-Aware Multi-Encoder Translation Models
Talk and poster presentation at the 60th Annual Meeting of the Association for Computational Linguistics; Dublin, Ireland.

5 Oct. 2021 Pre-Training Techniques for Context-Aware Multi-Encoder Translation Models
Scientific seminar at Naver Labs Europe research center; Grenoble, France.

10 Jul. 2020 Recent advances in document-level neural machine translation
Scientific seminar at LIG-GETALP, Université Grenoble Alpes; Grenoble, France.

11 Jun. 2020 Optimistic Policy Optimization via Multiple Importance Sampling
Poster presentation at the 36th International Conference on Machine Learning; Long Beach, California (US).

Skills

Languages **Italian**: native; **English**: fluent (TOEFL ITP: 640/667); **French**: fluent (lived 5 years in France).
Computer **Python** (pytorch, fairseq, hugging face, pandas, scikit-learn, numpy), **R, bash, VBA, SQL, HTML**.
Main Soft **Critical and analytical** thinking; **project management**; **communication** and **teaching**; **autonomous** work.