Angelo Rodio

Date of birth: 6 Jul 1995 | **Nationality:** Italian | **Phone number:** (+46) 702534852 (Work) |

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ABOUT ME

I am a **postdoctoral researcher** at **Linköping University**, **Sweden**, working with Professor **Erik G. Larsson** and Associate Professor **Prof. Zheng Chen** on **decentralized machine learning**.
Previously, I completed my **PhD** at **Inria**, **France**, working with **Dr. Giovanni Neglia** on **federated learning**.

Keywords:
Decentralized Machine Learning, Federated Learning, Optimization

Profile overview
- Bachelor's in Computer Engineering, Politecnico di Bari, Italy (2014-2018)
- Master's in Telecommunication Engineering, Politecnico di Bari, Italy (2018-2020)
- Master's in Computer Engineering, Université Côte d'Azur, France (2019-2020)
- Telecommunication Engineer at TIM S.p.a., Italy (2020-2021)
- PhD in Computer Science, Centre Inria d'Université Côte d'Azur, France (2021-2024)
- Postdoctoral researcher, Linköping University, Sweden (2024-present)

EDUCATION AND TRAINING

1 APR 2021 – 4 JUL 2024 Sophia Antipolis, France
PHD IN COMPUTER SCIENCE Centre Inria d'Université Côte d'Azur

Thesis: Client Heterogeneity in Federated Learning Systems
Advisors: Dr. Giovanni Neglia, Dr. Alain Jean-Marie (Team NEO)

1 SEP 2019 – 31 AUG 2020 Sophia Antipolis, France
MSC IN COMPUTER ENGINEERING (DOUBLE DEGREE) Université Côte D'Azur

Thesis in Internet of Things: *Design of a Wi-Fi Fingerprint-Based Indoor Positioning System for commercial smartphones.*
Advisors: Dr. Arnaud Legout, Dr. Chadi Barakat, Prof. Luigi Alfredo Grieco
Course Program and Exams: https://ubinet.univ-cotedazur.fr/node/76

Website https://ubinet.univ-cotedazur.fr/ | **Final grade** Très Bien | **Type of credits** ECTS | **Number of credits** 120

1 MAR 2018 – 20 OCT 2020 Bari, Italy
MSC IN TELECOMMUNICATIONS ENGINEERING (DOUBLE DEGREE) Politecnico di Bari

Double Diploma program between Université Côte d'Azur and Politecnico di Bari in Internet Engineering.
Course Program and Exams: https://www.poliba.it/it/didattica/corsi-di-laurea?course_id=10016&idCorsoCode=LM14%2F2015%2F2017

Final grade 110L | **Type of credits** ECTS | **Number of credits** 120

14 APR 2019 – 31 AUG 2019 Kazan, Russia
ERASMUS+ KA107 STUDENT Kazan National Research Technical University (KNRTU-KAI)

Website https://kai.ru/web/en/events/event?id=9600379

15 SEP 2014 – 28 FEB 2018 Italy
BSC IN COMPUTER ENGINEERING Politecnico di Bari

Thesis in Telecommunications Networks. *Study on the performance analysis of nanometric communication systems.*

Advisors: [Dr. Giuseppe Piro](#), [Prof. Gennaro Boggia](#).
Course Program and Exams: https://www.poliba.it/it/didattica/corsi-di-laurea?course_id=10002&idCorsoCode=LT17%2F2013%2F2014

Final grade 109 | **Type of credits** 180 | **Number of credits** ECTS

WORK EXPERIENCE

🏛 LINKÖPING UNIVERSITY – SWEDEN

Department Department of Electrical Engineering, Division for Communication Systems | **Email** angelo.rodio@liu.se |

Website https://liu.se/en/employee/angro77

POSTDOCTORAL RESEARCHER – 15 SEP 2024 – CURRENT

Publications

PhD Thesis
- **Angelo Rodio**. *Client Heterogeneity in Federated Learning Systems*. *PhD Dissertation, Université Côte d'Azur, 2024.*

Journal publications
- **Angelo Rodio**, Francescomaria Faticanti, Othmane Marfoq, Giovanni Neglia, and Emilio Leonardi. *Federated Learning under Heterogeneous and Correlated Client Availability*. *IEEE/ACM Transactions on Networking, 2023.*

Conference publications
- **Angelo Rodio**, Francescomaria Faticanti, Othmane Marfoq, Giovanni Neglia, and Emilio Leonardi. *Federated Learning under Heterogeneous and Correlated Client Availability*. In *INFOCOM*, IEEE, 2023.
- **Angelo Rodio**, Giovanni Neglia, Fabio Busacca, Stefano Mangione, Sergio Palazzo, Francesco Restuccia, and Ilenia Tinnirello. *Federated Learning with Packet Losses*. In *WPMC*, IEEE, 2023.
- **Angelo Rodio** and Giovanni Neglia. *FedStale: Leveraging Stale Updates in Federated Learning*. In *ECAI*, IOS Press, 2024.
- **Angelo Rodio**. *The Many Facets of Variance Reduction in Federated Learning*. In *ACM SIGMETRICS Performance Evaluation Review*, 2025.
- **Angelo Rodio**, Zheng Chen, and Erik G Larsson. *Optimizing Privacy-Utility Trade-off in Decentralized Learning with Generalized Correlated Noise*. To appear in *IEEE-ITW, 2025.*

Preprint publications
- Caelin Kaplan, **Angelo Rodio**, Tareq Si Salem, Chuan Xu, and Giovanni Neglia. *Federated Learning for Collaborative Inference Systems: The Case of Early Exit Networks*. arXiv:2405.04249, 2024.

Presentations & Talks
- *INFOCOM 2023*: [Fed. Learning under Heterogeneous and Correlated Client Availability](#)
- *IEEE WPMC 2023*: [Federated Learning with Packet Losses](#)
- *SIGMETRICS 2024:* [The Many Facets of Variance Reduction in Federated Learning](#)
- *ECAI 2024:* [FedStale: leveraging Stale Client Updates in Federated Learning](#)
- *PHD Defense 2024:* [Client heterogeneity in federated learning systems](#)

Teaching
- [Federated Learning and Data Privacy](#) — Université Côte d'Azur, 2023, 2024
- [Optimization for Machine Learning](#) — Université Côte d'Azur, 2022

Awards & Grants
- [ACM Sigmetrics' Student Travel Grant Program](#) (2024)

Professional Memberships
- IEEE Student Member (2023–), ACM Student Member (2024–)

🏛 TIM S.P.A. – ROME, ITALY

TELECOMMUNICATION ENGINEER – 1 SEP 2020 – 31 MAR 2021

🏛 CENTRE INRIA D'UNIVERSITÉ CÔTE D'AZUR – SOPHIA ANTIPOLIS, FRANCE

RESEARCH INTERN – 16 MAR 2020 – 31 AUG 2020

LANGUAGE SKILLS

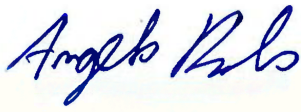Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1
FRENCH	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

Linköping , 12 Jul 2025

Angelo Rodio