

MATTEO GIOELE COLLU

PHD STUDENT IN BRAIN, MIND AND COMPUTER SCIENCE

BASIC INFORMATION

Italian Padova - Italy

Contacts

- https://collins-115.github.io/webpage/
- matteogioele.collu@phd.unipd.it
- <u>www.linkedin.com/in/matteo-gioele-collu-33b795227</u>

FIELDS OF INTEREST

- Algorithms and computability
- Machine and Deep Learning
- Security and Privacy of Al
- Mathematics and statistics
- Explainable Al

PROGRAMMING SKILLS

- Programming languages: Python, C,
 C++, Java, OCaml
- Tools and relevant libraries:
- TransformerLens, LangChain, Git, Latex, PyTorch, OpenCV, Excel, PySpark

LANGUAGES

- English C1/C2 Certified IELTS Academic
- Italian Native Speaker
- Spanish B1

ABOUT ME

I'm focused on the intersection of Explainable AI and Cybersecurity. You see my hunger in exploring the world, you see my foolishness in research and competitions. A disciplined yet unconventional thinker.

EXPERIENCE

• CTF - LL corsairs co-founder

- 5th position in LLMail-Inject, Microsoft prompt injection challenge
- 10th position in LLM-CTF competition SaTML 2024

Guest Researcher

Örebro University (Sweden), 08/2025 - 10/2025
 Explainability of failure modes in LLMs

Guest Researcher

Radboud University (The Netherlands), 10/2023 - 04/2024
 Safety of LLMs and Jailbreak Techniques

• Research Traineeship (Remote)

University of Aberdeen (Scotland), 02/2021 - 05/2021
 Development of chatbot for diet coaching

Publications

- <u>Publish to Perish: Prompt Injection Attacks on LLM-Assisted Peer Review</u>
- <u>Dr. Jekyll and Mr. Hyde: Two Faces of LLMs</u>
- Unaddressed Challenges in Persuasive Dieting Chatbots

Academic Projects

- Revealing Demographic Bias in LLMs
- Langchain Agent for Cognitive Support in Mild Cognitive Impairment
- Comparison between CNNs in melanoma classification

EDUCATION

• PhD student in Brain, Mind and Computer Science

Università degli Studi di Padova (Italy), 2024 - now **Topic**: Towards Secure Explainable AI and Misuse Prevention in LLMs

MSc in Computer Science (110L/110)

Università degli Studi di Padova (Italy), 2021 - 2024

Topics: Al & Deep Learning, Security of Machine Learning

Thesis: "Dr. Jekyll and Mr. Hyde: Two Faces of LLMs", <u>awarded by</u>

<u>Presidenza del Consiglio dei Ministri as one of the best cybersecurity</u>

<u>thesis in Italy.</u>

BSc in Computer Science (110L/110)

Università degli Studi di Cagliari (Italy), 2018 - 2021

Cyberchallenge Cybersecurity course

Università degli Studi di Cagliari (Italy), 2020

• Cryptography, Web Security, Network Security and Reverse Engineering