# Gabriele Morello

Born on the 26 November 1999 in Torino, Italy, based in Stockholm, Sweden

Contact me at gabrielemorello@protonmail.com

<u>Linkedin</u>

Github

Website

# **PROFILE**

Software engineer student with a strong passion for new technologies. My mindset is "Get Stuff Done" and I crave learning from every problem I tackle. I aim to work with big data and complex systems. I'm the person you ask to join your impossible project.

#### WORK EXPERIENCE

Jun 2023 - Jun 2024

### Research Assistant at KTH - Royal Institute of Technology

Stockholm, SE

- Research Assistant in ASSERT the Theoretical Computer Science division,
- I developed a program for automatic program repair of Solidity code, enhancing smart contract development through large language models.

Apr 2023 – Jun 2023

#### Research Assistant at RISE - Research Intitute of Sweden

Stockholm, SE

- I contributed to the development of Portals—a groundbreaking framework that unifies the Distributed Dataflow Streaming Model and Actor Model with a focus on edge stateful serverless processing,
- I played a key role in porting Scala APIs to Javascript, enhancing the framework's adaptability for edge computing environments.

Mar 2021 - Jun 2022

# Software Engineer at CERN - European Organization for Nuclear Research

Geneva, CH

- Developed a Quantum Key Distribution simulator based on BB84 in Python.
- I designed the platform backend with peer-to-peer and client-server architectures and
- I integrated it into federated learning frameworks (OpenFL, Flower) and into a medical data homomorphic encryption system.

#### **EDUCATION**

Aug 2022 - Present

# MSc in Software Engineering of Distributed Systems KTH - Royal Institute of Technology, Stockholm, SE

Stockholm, SE

- I focused on Data Science within the program's designated track.
- Anticipated thesis focuses on fine-tuning Large Language Models for synthesizing Solidity code in smart contract development.

Sep 2018 - Jun 2022

# BSc in Computer Engineering Politecnico di Torino, Torino, Italy

Torino, IT

Distinguished participant in the "Percorso Giovani Talenti" an excellence program recognizing the top 200 students
across all courses.

## **EXTRA-CURRICULAR ACTIVITIES**

Torino, IT

Feb 2020 - Jun 2022

## Student team member at Bit Polito

Contributed to Bit Polito as part of the management and R&D team. Implemented Schnorr signatures (BIP340) in Python.
 Organized events and contributed to the team podcast.

#### SKILL AND INTERESTS

One of my biggest passions is electronic music, and I've had the opportunity to perform live multiple times in self-organized events. Additionally, I have a keen interest in weightlifting and a deep appreciation for conceptual art. Some of my notable skills include: backend programming, data engineering, machine learning, smart contract development, quantum computing, research, Python, Scala, Java, JavaScript, cryptography, and data science.