# Serenella Valiani

I'm a PhD student in Computer Science in the Systems Security Modelling and Analysis - SySMA - unit at IMT School for Advanced Studies of Lucca. I studied Mathematics at the University of Siena both at the Bachelor's and at the Master's.

I'm currently studying Multi-Agent Systems, focusing on how they can be model through formal languages based on attribute-based communication.



## Education

2019 - ongoing IMT School for Advanced Studies of Lucca, Lucca

PhD in Computer Science

Systems Security Modelling and Analysis unit

Main topic. Formal languages, Process Algebra, Concurrency, Distribution, Attribute-based communication.

2015 - 2019 University of Siena, Siena

Master's Degree in Mathematics

Department of Information Engineering and Mathematics

Thesis title. Proteins classification through the integration of logical inference and machine learning.

Advisor: Prof. Michelangelo Diligenti | Final mark: 110 cum laude

2010 - 2014 University of Siena, Siena

**Bachelor's Degree in Mathematics** 

Department of Information Engineering and Mathematics

Thesis title. Edge and facet ideals' invariants. Advisor: Prof Cristiano Bocci | Final mark: 107

## Experience

2021 - ongoing IMT School for Advanced Studies of Lucca, Lucca

Students' Representative, Quality Enhancement Committee

Main activities. Coordinates Quality Assurance activities designing the QA system and guaranteeing its correct

functioning.

2017 - 2018 University of Siena, Siena

Student Tutor

Main activities. Classroom exercise of Analysis, Bright Night planning, open day at Unisi planning, tutoring ac-

tivities with little groups of students.

2016 - 2017 University of Siena, Siena

**Student Tutor** 

Main activities. Classroom exercise of Linear Algebra and Geometry, Third Mission activities planning.

## Languages

Native Italian

Other: English. FCE Certificate. Overall level: C1

Listening: C1 | Text comprehension: C1 | Writing: C1 | Speaking: C1

German. Overall level: A1

Listening: A1 | Text comprehension: A1 | Writing: A1.1 | Speaking: A1.1

## Digital skills

Basic Digital Word processing: Excellent | Electronic spreadsheet: Good | Data base administrators: Good

Competence Internet skills: Excellent | Multimedia Production: Excellent

Programming Python, C/C++, Rust, Java

Languages

Software MatLab, Office pack, CADP

Operating Linux (Arch Linux, Debian, Ubuntu), Windows

system