PERSONAL INFORMATION

Name **DE SANTIS GIULIA**

WORKING EXPERIENCE

• Dates (from – to)	01/10/2021 - Today
• Name of the Institute	Università Politecnica delle Marche
• Position	Teaching assistant
• Main activities	Class of exercises of Mathematical Analysis 1

• Dates (from – to)	01/06/2021 - Today
• Name of the Institute	Università Politecnica delle Marche
• Position	Post-doctoral researcher
• Main activities	Post-doctoral researcher in Numerical Analysis, with focus in Human-Robot interaction in manufacture and Radial Basis Function and with teaching assisting tasks.

• Dates (from – to)	15/10/2019 - 31-05-2021
• Name of the Institute	University of Verona
• Position	Post-doctoral researcher
• Main activities	Post-doctoral researcher in Computer Science, performing studies of Oblivious RAMs, Lambda calculus, Abstract interpretation, Quantum Computing.

• Dates (from – to)	01/10/2015 - 31/12/2018
• Name of the Institute	INRIA Nancy Grand-Est (France)
• Position	Doctoral researcher
• Main activities	Research topic: “Modeling and Recognizing Network Scanning Activities of the IPv4 space through Hidden Markov Models”. More in detail, the goal was to learn Hidden Markov Models of Network Scanners from logs collected by a Darknet, and to use the obtained models to detect them.

EDUCATION

• Dates (from – to)	01/10/2015 - 20/12/2018
• Name of the Institute	Université de Lorraine, Nancy Grand-Est (France)
• Obtained degree or certificate	Ph.D. in Computer Science, Network Security. Thesis: “Modeling and Recognizing Network Scanning Activities of the IPv4 space through Hidden Markov Models”.

• Dates (from – to)	01/10/2011 - 27/04/2015
• Name of the Institute	Technische Universität Clausthal (Germany)
• Obtained degree or certificate	Master Degree in Applied Mathematics, 1.1/5.0. Thesis: “Analysis of Social Network Using Exponential Random Graph Models”.

• Dates (from – to)	01/10/2011 - 15/04/2015
• Name of the Institute	Università degli Studi di Camerino (Italy)
• Obtained degree or certificate	Master Degree in Mathematics and Applications, 110/110 cum Laude. Thesis: “Analysis of Social Network Using Exponential Random Graph Models”.

PUBLICATIONS

• Title	Modeling and Recognizing Network Scanning Activities with Finite Mixture Models and Hidden Markov Models
• Authors	Giulia De Santis
• Institution and year	Université de Lorraine, 2018

• Title	Internet-Wide Scanners Classification using Gaussian Mixture and Hidden Markov Models
• Authors	Giulia De Santis, Abdelkader Lahmadi, Jerome Francois, Olivier Festor
• Conference	9th IFIP International Conference on New Technologies, Mobility and Security, 2018

• Title	HuMa: A multi-layer framework for threat analysis in a heterogeneous log environment
• Authors	Julio Navarro, Véronique Legrand, Sofiane Lagraa, Jérôme François, Abdelkader Lahmadi, Giulia De Santis, Olivier Festor, Nadira Lammari, Fayçal Hamdi, Aline Deruyver, Quentin Goux, Morgan Allard, Pierre Parrend
• Conference	International Symposium on Foundations and Practice of Security, 2017

• Title	Modeling IP scanning activities with Hidden Markov Models: a Darknet study
• Authors	Giulia De Santis, Abdelkader Lahmadi, Jerome Francois, Olivier Festor
• Conference	8th IFIP International Conference on New Technologies, Mobility and Security, 2016

INVITED TALKS

• Title	Modeling and Recognizing Network Scanners of the IPv4 space through Hidden Markov Models
• Date and Place	24/06/2019 at University of Verona, Italy

• Title	Internet-Wide Network Scanners Classification using Finite Mixture and Hidden Markov Models
• Date and Place	03/10/2018 at University of Camerino, Italy

• Title	Classifying Internet-wide scanners using Gaussian Mixture and Hidden Markov Models
• Date and Place	21/11/2017, IMDEA Institute, Madrid

LANGUAGES

• Italian	Mother tongue
• English	Fluent, Primary English Test (2006), Actual level: C1/C2
• German	Test DAF: 4.0. Level: C1
• French	Level: B2/C1