
























PERSONAL INFORMATION

Name  **DE SANTIS GIULIA**

WORKING EXPERIENCE

- Dates (from – to)  28/02/2022 - Today
- Name of the Institute  Università Politecnica delle Marche
 - Position  Contract Professor
 - Main activities  Course in Numerical Analysis, Bachelor Degree in Computer and Automation Engineering
- Dates (from – to)  01/10/2021 - 21/12/2021
- Name of the Institute  Università Politecnica delle Marche
 - Position  Teaching assistant
 - Main activities  Course in exercises of Mathematical Analysis 1, Bachelor Degree in Mechanical Engineering
- Dates (from – to)  01/10/2021 - 20/12/2021
- Name of the Institute  Università Politecnica delle Marche
 - Position  Teaching assistant
 - Main activities  Class in exercises of Mathematical Analysis 1, Bachelor Degree in Computer and Automation Engineering
- 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.
- 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