

CURRICULUM VITÆ

Name: Marco Cremonini

Place and date of birth: Bologna, Italy, 25 December 1968

Email: marco.cremonini@unimi.it

AFFILIATION

From December 2003 to September 2019: Department of Computer Science – University of Milan.

From October 2019: Department of Social and Political Science – University of Milan (currently, waiting for approval by the CdA of the University of Milan).

LAUREA DEGREE

Electronic Engineer at the University of Bologna, Italy in 1995, with a thesis developed under the Erasmus Program at ENSERB of the University of Bordeaux, France.

PH. D.

Obtained in January 2000 with a thesis titled "Security and Mobility Issues in Software Agent Systems" at the Department of Electronics, Informatics, and Systems (DEIS) of the Engineering Faculty of the University of Bologna, Italy.

POST-DOC RESEARCH FELLOWSHIP

From September 2000 to October 2001, Research Assistant at the Institute for Security Technology Studies (ISTS) of Dartmouth College, Hanover, NH, USA. During the fellowship, the research focused on intrusion detection systems and event correlation techniques, collaborating with the research group coordinated by Prof. David Kotz and Prof. Daniela Rus.

VISITING SCHOLARSHIP

From May to June 2016, Visiting Scholar in the Department of Electrical and Computer Engineering of the University of Virginia, Charlottesville, VA, USA. The scholarship has been spent at the Center for Automata Processing (CAP) collaborating with Prof. Mircea Stan.

RESEARCH LAB AFFILIATION AND PROJECT MEMBERSHIP

Faculty member of SESAR Lab (<http://sesar.di.unimi.it/>) of the Department of Computer Science, University of Milan.

From 2016, member of the EVOTION European project (<http://h2020evotion.eu/>) on Big Data supporting public hearing aid policies. Within this project, I have served as Work Package Leader, Task Leader, Deliverable author and reviewer, and member of the Coordination and Management Board.

RESEARCH ACTIVITY

Current research activity is concentrated on adaptive multilayer networks, network controllability, epidemics modelling, risk analysis, economic and social aspects of information technology, and information security.

Multilayer networks, controllability, and epidemic models

This research activity started in 2009 with the definition of a first model and the development of a multiagent simulation tool aimed at studying the diffusion of knowledge into a social network. Trust dynamics, self-organizing strategies, and control were the aspects mostly investigated. The results appeared in the

Proceedings of some international conferences.

Cybercrime and information security

Research in this area started during the Ph.D., continued with the fellowship at Dartmouth College, mostly in the area of Network Intrusion Detection Systems (NIDS), and is still active, in particular on cybercrime markets and vulnerability assessment.

Together with a former student, I have been one of the founder of the Italian Chapter of The HoneyNet Project (<http://www.honeynet.it>), aimed at studying and developing systems and techniques for botnet analysis and protection. This research has produced some scientific publications and has involved about 15 students.

Research on the economics of information security is a long-lasting activity, mostly focused on the study of game theoretic models for the strategic interaction between attackers and defenders. Some publications on international journals have been produced. More recently I collaborated to research on 0-day vulnerabilities, bug bounty programs, and the organization of cybercrime markets together with students and researchers from different countries (UK, The Netherlands, Switzerland).

PH.D. AND LAUREA THESIS SUPERVISION

Starting from September 2018 and until September 2019, co-supervisor of Ph.D. student Samira Maghool of Alzharah University, Teheran (Iran), currently Visiting Scholar in the Department of Computer Science of the University of Milan, for the Ph.D. thesis on the study of awareness in epidemics on networks. From 2006 to 2008, co-supervisor of Prof. Claudio Agostino Ardagna's Ph.D. thesis.

Supervisor of more than 140 Laurea thesis, Bachelor or Master, for the University of Milan. Some thesis obtained awards and produced scientific publications on peer reviewed proceedings and journals.

COORDINATOR OF ADVANCED COURSE (Corso di Perfezionamento)

Organization and coordination of the Advanced Course (Corso di Perfezionamento) "IT Governance: Management techniques and tools for efficiency improvement and risk control in enterprise information systems" of the University of Milan – March-June 2010.

The course was mostly addressed to graduated professionals interested to extend their skills towards IT process and infrastructure management. Industrial partners were: Deloitte ERS, AIEA - ISACA Milan Chapter, Boehringer-Ingelheim, IBM Italia, Hewlett-Packard, Opera21.

DEPARTMENTAL ACTIVITY

From 2018, member of the Ph.D. Academic Board (Collegio di Dottorato) of the Department of Computer Science.

Member of the Department's Commission for Students Orientation. In this capacity, organization of several lectures/seminars by IT companies.

Previously, member of the Commission for Student Stages.

TEACHING

Ph.D. Teaching

February 2019

Introduction to Data Ethics, University of Milan.

(<http://www.unimi.it/ricerca/dottorati/126076.htm?ins=R18-51&anno=2019>)

Laurea Degree Teaching

Forthcoming in the 2nd semester of 2019

Methods and Applications for Social Networks (8hr) for the Bachelor (Laurea Triennale) in Informatics for Digital Communication - University of Milan.

From 2009 to 2019

Risk analysis and management for the Master (Laurea Magistrale) in Information Security - University of Milan.

From 2005 to 2010

Network security for the Bachelor in Security of systems and networks (both in the traditional and in the online editions) - University of Milan.

From 2008 to 2010

Secure operating systems for the online edition of the Bachelor (Laurea Triennale) in Security of systems and networks, University of Milan.

From 2006 to 2009

Prevention and control of intrusions for the Bachelor (Laurea Triennale) in Security of systems and networks - University of Milan.

From 2004 to 2010

Introduction to Informatics for humanistic sciences (computers) for the Laurea in Scienze Giuridiche of the Faculty of Law, University of Milan.

27 March 2018