UNIVERSITÀ DEGLI STUDI DI MILANO

TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO **ID CODE : 4416**

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at Dipartimento di Informatica "Giovanni Degli Antoni"

Scientist- in – charge: **Prof. Ernesto Damiani**

[MARYAM EHSANPOUR]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	**Ehsanpour**
Name	**Maryam**
Date of birth	**29, 07, 1980**

PRESENT OCCUPATION

Appointment	Structure

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree			
Specialization			
PhD	**Ph.D. in Computer Science**	**Department of Computer Science "Giovanni Degli Antoni", Università degli Studi di Milano, Italy**	**2018**
Master	**M.Sc., Computer Systems Architecture Engineering**	**Azad University of Arak, Iran**	**2010**
Degree of medical specialization			
Degree of European specialization			
Other			

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28/11/2019

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City

FOREIGN LANGUAGES

Languages	level of knowledge
English	**Advanced**

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2017	**Reviewer** of Conference paper entitled "Synthesis of Approximate Coders for On-chip" Interconnects Using Reversible Logic" in DATE 2016 Conference. *https://www.date-conference.com/*
2018	Member of **Marie Sklodowska-Curie** Research and Innovation center.
2015	Member of **MDPS doctoral college / IRIXYS Research Centre** *(2015-Now)*, http://irixys.uni-passau.de/mdps-phd-programme/
2009-2011	Active Member of **Young Researchers Club** *(2009-2011)*. http://www.bpj.ir/
2007-2011	Received High Rank (**Excellent**) in **scientific skills and teaching** by Azad Universities of Falavarjan *(2007-2011)*, Azad Universities of Dolat-abad *(2010-2011)* and Science & Technology of Tiran & Karvan *(2007, 2011)*.

TRAINING OR RESEARCH ACTIVITY

description of activity:

Researcher:

Politechnico di Milano University *(April - November 2014)*
Department of Electronic, Information and Bioengineering (DEIB)
Project Title: "Analysis of Energy-Efficient Buildings through Simulation and Formal Methods"
Project Headmaster: Prof. Luciano Baresi

Research visitor: (MSC European Felowships)
IROC Technologies, Grenoble, France *https://www.iroctech.com/* *(April – Jun 2017)*

Name of the EU programme: Marie Sklodowska-Curie (MSC) Research and Innovation Staff Exchange (RISE), Horizon 2020 - Research and Innovation Framework Programme.
Project Title: Synthesis and Performance Optimization of a Switching Nano-crossbar Computer "*focus on the verification and simulation tools for the generation and optimization of testable digital circuits*"

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Researcher:
Università degli Studi di Milano **and** *Khalifa University (KUSTAR)* *(May 2018– Now)*
Project Title: Improving the Security of Logic-Locking using Quantum System in obtaining the Secret key.
"focus in using Quantum key generation algorithm in the mechanism of obtaining the secret key in logic-locking technique."
Project Headmaster: Prof. Ernesto Damiani

Researcher:
Università degli Studi di Milano

Trustworthy model-aware Analytics Data platform – TOREADOR
"Study and analysis of techniques based on Quantum Logic to improve data confidentiality deriving from Big Data analytics performing the following activity",
The activity of the collaborator will take place on study of the application of Quantum Logic techniques to Big Data analytics and modern Data Analytics techniques.

PROJECT ACTIVITY

Year	Project
2018	Project Title: "Toward Lower Communication in Garbled Circuit Evaluation" *" focus in reducing number of interactions between parties in secure multi-party computation, which results in a less transfer complexity, and therefore in a more efficient secure computation"* Project Grade = *Very Good* Supervisor: **Prof. Ernesto Damiani**
2010, 2015	Project Title: "Analysis, Design and Synthesis of Reversible Circuits using Quantum Gates (2009-2012) Supervisor: Prof. Payman Moallem. Exploiting Quantum Gates in Secure Computation (2015-2018), Supervisor: Prof. Ernesto Damiani
2014	Project Title: "Analysis of Energy-Efficient Buildings through Simulation and Formal Methods" Department of Electronic, Information and Bioengineering (DEIB), *Politecnico di Milano University (April - November 2014)* Project Headmaster: Prof. Luciano Baresi
2019	Project Title: *"Trustworthy model-aware Analytics Data platform,TOREADOR"* *"Study and analysis of techniques based on Quantum Logic to improve data confidentiality deriving from Big Data analytics performing the following activity"*, The activity of the collaborator will take place on study of the application of Quantum Logic techniques to Big Data analytics and modern Data Analytics techniques.
2018	Project Title: *"Improving the Security of Logic-Locking using Quantum System in obtaining the Secret key"* *"focus in using Quantum key generation algorithm in the mechanism of obtaining the secret key in logic-locking technique", Università degli Studi di Milano* **and** *Khalifa University (KUSTAR) (May 2018– Now)* Project Headmaster: Prof. Ernesto Damiani
2010	Project Title: *"Design of a Reversible Multiplier Circuit with Adder to Improve Quantum Parameters"* Supervisor: **Prof. Payman Moallem**

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PATENTS

Patent

CONGRESSES AND SEMINARS

Date	Title	Place
19-23January 2015	**13th MDPS/ IRIXYS PhD-Track:** (Doctoral colleges of the Universities of Lyon, Milan, and Passau and of the double master of the Universities of Lyon and Passau)	*Besancon, France*
23-27 November 2015.	**15th MDPS/ IRIXYS PhD-Track:** (Doctoral colleges of the Universities of Lyon, Milan, and Passau and of the double master of the Universities of Lyon and Passau)	*Lyon , France*
20-24June, 2016.	**16th MDPS/ IRIXYS PhD-Track:** (Doctoral colleges of the Universities of Lyon, Milan, and Passau and of the double master of the Universities of Lyon and Passau)-	*Garda Lake , Italy*
September 21, 2016.	***Secure Computation of Social Prestige and Influence from Multiple Networks*** Speaker: Tamir Tassa (The Open University of Israel)	Universita Degli Studi di Milano
September 29, 2016.	***IEEE Milestone to the Dadda's Multiplier***	Universita Degli Studi di Milano and Politecnico di Milano University
November 22, 24-2016.	***Introduction to the MIPS architecture and PowerVR GPU***	Universita Degli Studi di Milano
March 9-13, 2015.	Biss 2015- Bertinoro International Spring School 2015	Bertinoro, Italy
September 23-27, 2015.	**Schools:** Summer school on Secure and Trustworthy Computing Bucharest	Romania

PUBLICATIONS

Book:

"Technical Aspects of Quantum Computers", Payman Moallem, Mohsen Ashourian , Maryam Ehsanpour, Zahra Moghare-abed, Published by Department of Electrical Engineering, Faculty of Engineering, Azad University of Majlesi, Isfahan, Iran , 2011.

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Journal and Conference Papers:

"***Boolean Post-processing Procedure for the Synthesis of Garbled Circuits***", Stelvio Cimato, Valentina Ciriani, Ernesto Damiani, Maryam Ehsanpour, *STM2019, 26 September-27 September, Luxembourg.*

"Exploiting Quantum Gates in Secure Computation", Maryam Ehsanpour, Stelvio Cimato, Valentina Ciriani, Ernesto Damiani, *Euromicro Conference on Digital System Design, (DSD), 30 August - 1 September 2017, Vienna, Austria.*

"A Multiple Valued Logic Approach for the Synthesis of Garbled Circuits", Stelvio Cimato, Valentina Ciriani, Ernesto Damiani, Maryam Ehsanpour, *25th IFIP/IEEE International Conference on Very Large Scale Integration (VLSI-SoC), 23 October-25 October 2017, Yas Viceroy, Yas Island, Abu Dhabi.*

"Toward Design of Garbled Circuits Using Quantum Gates", Maryam Ehsanpour,*IEEE COMPSAC Conference, Building Digital Autonomy for a Sustainable World, Politecnico di Torino, Turin, Italy, 2017July 4-8, Fast Abstract .*

"Analysis of Energy-Efficient Buildings through Simulation and Formal Methods", Maryam Ehsanpour, Luciano Baresi, Matteo Rossi, Ernesto Damiani, *SIMPDA2016, Sixth International Symposium on Data-Driven Process Discovery and Analysis, 15-16 December 2016, Graz, Austria.*

"Design and optimization of Reversible Arithmetic Logic Unit using New Reversible Logic Gates", Payman.Moallem, Maryam.Ehsanpour, Ali Bolhasani , Mehrdad.Montazeri, Journal of Electronics, (JOE),2014.

"A Novel Design of Reversible Multiplier Circuit", Payman Moallem , Maryam Ehsanpour, International Journal of Engineering,(technical note) ,(2013).

"Design of a Novel Reversible Multiplier Circuit Using Modified Full Adder", Payman Moallem, Maryam.Ehsanpour, Abbas Vafaei , 2010 International Conference on Computer Design and Applications (ICCDA 2010) , included in the IEEE Xplore, and Indexed by International Association of Computer Science and Information Technology(IACSIT), June25-27,2010, Qinhuangdao, China.

"Designing and Simulation Blocks of the OFDM Modulator", Maryam Ehsanpour, Sanaz Asadinia, Farzaneh Pakzad,Neda Meibody, Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE) - Isfahan branch, No.9, pp.4-7, 2009.

OTHER INFORMATION

Technical Skills

HDL: Verilog, VHDL

Programming: VB, C++, C#, HTML , ASP, Java , Modelica , Zot, MATLAB

Quantum (Reversible) circuits Synthesis: RevKit

Circuit Synthesis: CUDD, ABC, ZamiaCad, ISCAS

Multi-party Computation Synthesis: Fairplay, Scapi, TinyGarble, JustGarble

Other: AutoCAD, Photoshop, Flash, Dreamweaver, Multimedia Builder, Simulink

Teaching Courses

Computer Programming on Web Base	Logic Circuits
Computer Architecture	Data Structures
Assembly Language and Machine Structure	Computer programming in C++
Operating System and its Workshop	Internet Basics
Computer Graphic	Web Design

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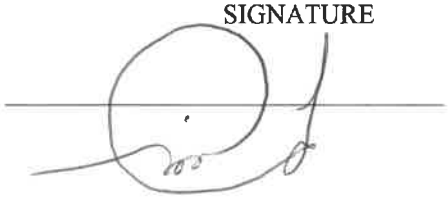
Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Milan, Italy, 28/11/2019

SIGNATURE



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