TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO   **ID CODE 4301**

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,** Scientist- in – charge **Prof. Maria Luisa Damiani**

[Fatme Hachem]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Hachem
Name	Fatme
Date of birth	13/01/1989

PRESENT OCCUPATION

Appointment	Structure
Post-doctoral researcher (Assegnista di ricerca)	University of Milan, Department of Computer Science

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	Computer and Communication Engineering	Faculty of Engineering, Lebanese University	2011
Specialization	Telecommunication Networks	Saint Joseph University & Lebanese University	2012
PhD	Computer Science	University of Milan	2018
Master			
Degree of medical specialization			
Degree of European specialization			
Other			

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City
2011	Order of Engineering	Beirut, Lebanon

FOREIGN LANGUAGES

Languages	level of knowledge
English	Fluent speaking, writing and reading
Italian	Very good speaking, writing and reading (Livello B2 CILS)
French	Very good speaking, writing and reading
Arabic	Native

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award

TRAINING OR RESEARCH ACTIVITY

description of activity (Post-doctoral research activity) :
The research activity focuses on the semantic integration of sensors data generated in a heterogeneous context: extraction rules have been developed in order to identify the relevant information given by the sensor and to which it is possible to assign a sematic label, and also for the purpose of transforming the data into a common representation. These transformations have a positive impact on the development of IOT applications.

(Doctoral research activity):
The research focuses on segmentation methods for the partitioning of spatial trajectories in semantically meaningful sub-trajectories and their application to the analysis of mobility behavior. Such methods can be utilized for example to detect the sequences of places or regions visited by moving objects.

PROJECT ACTIVITY

Year	Project
2018-2019	Project Snap4City, University of Milan: Implementing a product model and innovating a process that contributes in the creation of a social network connecting objects like sensors and actuators in a city. The project is typical for an IoT context that aims to collect and share data from heterogeneous and numerous devices enabled by IOT/IOE technologies and big data analytic, for purposes of management and better interaction in order to cope the city evolution in terms of services and city users' needs and capabilities. Snap4City is proposed in response to Select4Cities challenges and is funded by the European Union's Horizon 2020 research and innovation program.

2012-2015	Many software projects have been developed while working in Delta call & Foo Companies in Lebanon, mainly Android mobile application development, such as: -News Apps: LBCI News, The Daily Star -Business Apps: Beirut Airport: the Beirut-Rafic Hariri International airport Android app, Doos: the first app for buying and selling used cars with Video. -Entertainment Apps: Movies In Lebanon- a guide for the Lebanese cinema movies and theaters. - Brands related Apps: Bridgestone Lebanon-provides services for the Bridgestone Tires users as well as information and guide for the company's products.
2012	Modelling and Analysis of PHY & MAC layers' Performance for a new optical communication vector in free space. The project studies the possibility of using the visible light for communication in a vehicular environment. The Master's project, done under the supervision of LISV- Saint-Quentin University, Versailles, France.
2011	Server-Clients system for Location Based Services LBS. This is the Engineering graduation project, it presents an android mobile application in LBS domain. It investigates the importance of LBS and it explains and compares between the different mobile operating systems and platforms. The application is to provide information automatically to the visitors of Beirut national museum according to their locations inside of it.

PATENTS

Patent
CISCO – CCNA 1, 2, 3 & 4
CILS B2- Italian Language

CONGRESSES AND SEMINARS

Date	Title	Place
July 2019	ETSI Technology Awareness Roadshow for SMEs	TIM OPEN LAB Torino
November 2017	IEEE International Conference on Data Mining (ICDM)	New Orleans, USA
2017	Multidisciplinary Perspective on Big Data	Politecnico di Milano
June 2016	The 16th MDPS Workshop	Garda Lake, Italy
September 2015	12th EDBT Summer School about "Graph Data Management"	Palamós, Spain
2012	The Third Symposium on Broadband Networks and Fast Internet" RELABIRA'	Beirut, Lebanon
2011	Developers' boot camp organized by Forum Nokia and Nokia Levant	Beirut, Lebanon

PUBLICATIONS

Articles in reviews
Cluster-based trajectory segmentation with local noise / Maria Luisa Damiani, Fatima Hachem, Hamza Issa, Nathan Ranc, Paul Moorcroft & Francesca Cagnacci. Data Mining and Knowledge Discovery, 1-39. (2018)
Segmentation techniques for the summarization of individual mobility data / Maria Luisa Damiani and Fatima Hachem. Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery 7(6). (2017)
Snap4City: A Scalable IOT/IOE Platform for Developing Smart City Applications / C. Badii, E.G. Belay, P. Bellini, D. Cenni, F. Hachem, M. Marazzini, M. Mesiti, P. Nesi, G. Pantaleo, M. Paolucci, S. Valtolina, M. Soderi, I. Zaza - In: 2018 IEEE SmartWorld, Ubiquitous Intelligence & Computing, Advanced & Trusted Computing, Scalable Computing & Communications, Cloud & Big Data Computing, Internet of People and Smart City Innovation (SmartWorld/SCALCOM/UIC/ATC/ CBDCom/IOP/SCI) : IEEE press, 2018. - ISBN 9781538693803. - pp. 2109-2116.

Congress proceedings
Location relevance and diversity in symbolic trajectories with application to telco data/ M.L. Damiani, F. Hachem, C. Quadri, S. Giato – In: 16th International Symposium on Spatial and Temporal Databases ,Vienna, Austria, August 2019
Periodic stops discovery through density-based trajectory segmentation / F. Hachem and M.L. Damiani- In 26th ACM SIGSPATIAL, Seattle, WA, USA.2018
Discovering gatherings based on individual mobility patterns: challenges and direction/ Fatima Hachem, Maria Luisa Damiani, and Hamza Issa. In Proc. IEEE on Spatial and Spatiotemporal Data Mining (SSTDM), New orleans, USA, Nov 2017.
Migro: A plug-in for the analysis of individual mobility behavior based on the stay region model"/ Maria Luisa Damiani, Hamza Issa, Giuseppe Fotino, Fatima Hachem, Nathan Ranc, and Francesca Cagnacci. In Proc. ACM SIGSPATIAL, USA, Nov 2015.
Snap4City Evolving Solution for IOT Based Smart Cities / C. Badii, P. Bellini, A. Difino, F. Hachem, M. Mesiti, P. Nesi, G. Pantaleo, M. Paolucci, S. Valtolina – In: 5th Italian Conference on ICT for Smart Cities And Communities Pisa, Italy , 18-20 September, 2019.
Node-RED IOT Applications for Smart City / C. Badii, P. Bellini, A. Difino, F. Hachem, M. Mesiti, P. Nesi, S. Valtolina – In: 5th Italian Conference on ICT for Smart Cities And Communities Pisa, Italy 18-20 September, 2019.
Snap4City a Solution for highly collaborative Smart Cities Environments / C. Badii, E.G. Belay, P. Bellini, D. Bologna, D. Cenni, A. Difino, F. Hachem, M. Marazzini, M. Mesiti, N. Mitolo, P. Nesi, I. Paoli, M. Paolucci, S. Valtolina, I. Zaza - In: 4th Italian Conference on ICT for Smart Cities and Communities, L'Aquila, Italy, 19-21 September, 2018.
Facilitating the Development of IoT Applications in Smart City Platforms/ S. Valtolina, B. Barricelli, F. Hachem, S. Getachew, S. Bonfitto, M.Mesiti -- In 7th International Symposium on End-User Development. Hertfordshire, UK, 2019
On the Bulk Ingestion of IoT Devices from Heterogeneous IoT Brokers / S.Bonfitto, F. Hachem, E. Getachew, S. Valtolina, M. Mesiti - In IEEE Int'l Congress on Internet of Things, Milan, Italy, 2019.

OTHER INFORMATION

UNIVERSITÀ DEGLI STUDI DI MILANO

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: Milano, 31/07/2019

SIGNATURE

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