



Professional Adresse:

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Resuming

Actual Situation: Associate professor at AAUP University, PhD Program Coordinator in EIT, Palestine, PLUS Project coordinator (France Palestine Universities solidarity) and chair for the HIS4 Smart heritage international conference.

General presentation

Received the M.Sc. and Ph.D. degrees in computer science from the Ecole des Mines (The French Excellence Engineering school) and Claude Bernard Lyon1 University in 2002 and 2007 respectively (French government excellence scholarship). He is associate professor at AAUP University and the coordinator for the PhD program in Information Technology Engineering. He was researcher and lecturer in the University of Le Havre and the University of Claude Bernard Lyon1, Lyon, France. Laboratory LMAH, Le Havre, Project GRR, and LIRIS laboratory at research group SILEX team, ex member in: Knowledge and Complex Systems, and member in the « Association Francophone de Recherche d'Information et Applications» (ARIA).

Member in more than 10 technical committees of international Journals, international conferences technical and steering committees. He published in many journals and conferences papers with impact factor. Coordinator for many Franco-Mediterranean projects. Interested in smart heritage systems using intelligent agents and tools to build heritage applications. One of the co-founders for the hyper heritage international seminar and the chair for HIS4 Conference. **EU expert** in ECAS for ERASMUS and H2020 with code **EX2014D22226**

Functions

2019-Present: PhD Program Coordinator in EIT, Palestine

2012/2013- Present: Associate professor Lyon1, CNAM Rhone Alpes, and AAUP Universities and PhD, ex-MSc Master Program coordinator.

2012-09/2013 Le HAVRE University- Research engineering project for le Havre port-transporting dangerous materials

2010-2013 SILEX team, LIRIS, Université Claude Bernard Lyon1, Lyon, and Le Havre University, PLUS Project coordinator.

2008-2009: Al-Quds University, (Palestine) and Member in LIRIS laboratory till 2010. PLUS Project coordinator.

2006-2008 Assistant Professor Claude Bernard Lyon 1 University, and PLUS Project coordinator.

2006-2007 IUT B Lyon, IT department

2007-2008 Faculty of Médecine, Claude Bernard Lyon1 University

1994-2001 IT Director department, Palestinian authority, Ministry of Health and Palestinian legislative council

Formations :

- PhD in Intelligent Systems (LIRIS, UCBL1, «Reorganizing Dynamic Information Resources in Complex Web according to Complex Adaptive Systems Perspective», 2007 (bourse d'excellence du gouvernement Français).
- Master in Web Intelligence Systems (Artificial Intelligence) at « Ecole des Mines » de Saint-Étienne (bourse d'excellence du gouvernement Français), 2002.
- HIS Professionnel Certificat, Health Information System, AP-HP de Paris (bourse du gouvernement Français). 1998
- Hardware engineering systems, Benghazi University, 1994
- System analysis and programming, An Najah University, Bac +2, 1988

Teaching Competences (~1100H TD):

From 2006 to 2008, I start my teaching career as a Lecturer in Computer Science Department of the University of Lyon 1, Medicine faculty, and IUT B Lyon. During this period, I taught TD and TP course for undergraduate students. The entire teachings made an overall hourly volume of 184 HTD, divided mainly between ENI data base and algorithmic programming, and real-time operating systems. In addition, I have been on of the " Methodology work team" for new graduates to medical school at the University Lyon 1 and IUT B LYON.

At 2008-2009, Computer Science Department, University of Jerusalem. I assured a load of 36 CH (American System *) allocated between algorithm and system architecture, database, interaction and intelligent agent systems, and project 1 and Project 2. Since 2009, now I'm at the Ecole Polytechnique and university of Lyon 1 (EPUL) Engineering School. During this period, I taught my lessons as part of CM and labs IT engineer students, License, Master 1 and Master 2. The entire teachings made an overall hourly volume over 280 HTD.

Since 2009 till now, I taught and did high quality research with PhD, Master, and undergraduate students in Lyon 1 university, Al Quds university, CNAM France Le Haver university, and AAUP university.

The following table illustrates the main teaching fields and the different courses taught

<i>Domain</i>	<i>Keywords</i>
Operating Systems (2 nd)	Unix, Windows, Advanced OS
Artificielle Intelligence (Master)	Modelling, Programming, Prolog, SMA
Complex Adaptive Systems(Master)	Sub-Models ,Aggregation, tagging, simulation
IT Modelling (4 th and master)	Intelligence agents, Web, intelligent water systems , transportation, GIS based systems
Algorithmic and Programming (1 st and 2 nd year)	C++, Java
Information Systems(3rd)	C2I, PCI, 2C2I
Data Base and Data Mining(2 nd , 3 rd , and Master)	DB modelling, Algorithmic and data structure , SQL, Oracle, multi-dimension DB and Data Mining
Software engineering : SWE for undergraduate and graduated levels	Agile, UML2, BPMN2, Intelligent Software engineering
Big Data and cloud computing	

Research fields:


In these days I am interesting in the Smart Cities research issues; water, transportation, and Cultural Heritage. Not limited to the last domain I am interesting and working in Risk management and Decision making complex systems modelling, Complex Adaptive Systems and Ecosystems, robustness and accessibility of self* Systems, conception and engineering of self* systems (self- organization, self-adaptation, self-management...), Emergence, Virtual environments, Personalised semantic Web, medullisation web ontology and mobiles services, artificial Agents, Multi Agents Systems, Data and web mining, Usage mining structure mining, content mining, Cloud computing. Many publications was published in the last domains.

Publications

2022

Visitor Tracking Model using Ants Colony Behavior-Ants Tracker (Ants Tracker), Muath Sabha , Rasha Assaf, Eman naser and Amjad Rattrout,
HyperHeritage International Symposium, 2022, Casablanca, Morroco

2021

- Amjad Rattrout, Rashid Jayousi, Karim Benouaret, Anis TISSAOUI , and Djamal Benslimane, Designing Intelligent Marine Framework based on Complex Adaptive System Principles, Transactions on Large-Scale Data and Knowledge-Centered Systems Journal, Springer Journal
- Mansour Naser Alraja , Hanadi Barhamgi, Amjad Rattrout, Mahmoud Barhamgi:
An integrated framework for privacy protection in IoT - Applied to smart healthcare. Comput. Electr. Eng. 91: 107060 (2021)

- Mohammed Maree, Amjad Rattrout, Muhanad Altawil, Mohammed Belkhatir: Multi-modality Search and Recommendation on Palestinian Cultural Heritage Based on the Holy-Land Ontology and Extrinsic Semantic Resources. ACM Journal on Computing and Cultural Heritage 14(3): 29:1-29:23 (2021)

2020

- A Multi-agent Framework for Visitor Tracking in Open Cultural Places, M Safarini, R Safarini, T Thaher, A Rattrout, M Sabha, Agents and Multi-Agent Systems: Technologies and Applications 2020, 155-165
- Human Tracking in Cultural Places Using Multi-agent Systems and Face Recognition, A Hassan, A Sawan, A Rattrout, M Sabha, Agents and Multi-Agent Systems: Technologies and Applications 2020, 177-186

2019

- Sentiment Analysis on Arabic Content in Social Media: Hybrid Model of Dictionary Based and Fuzzy Logic, Amjad Rattrout, Ateeq Ateeq, ACM ICFNDS '19: Proceedings of the 3rd International Conference on Future Networks and Distributed Systems,
- Cloud Computing Host's fault tolerance using Multi-Agent Amjad Rattrout, Sanad Ahmad and Jehad Khlouf, INTIS2019, P167/ISBN: 9789981130001
- Hybrid Cloud-Based Mobile Payment Secure & Compliance Model Amjad Rattrout and Adel Hassan, INTIS2019 P2013, ISBN: 9789981130001

2018

- Enhancing AODV Routing Protocol to Predict Optimal Path Using Ant Colony Algorithm in MANET MA Zant, S Jabareen, A Rattrout, M Hamarsheh, International Journal of Applied Engineering Research 13 (18), 13637-13646
- Clustering algorithm for AODV routing protocol based on artificial bee colony in MANET, Amjad RATTROUT, Adwan Yasin, Mahmoud Abu-Zant, Mariam Yasin, Mohammed Dwaikat, ACM ICFNDS '18: Proceedings of the 2nd International Conference on Future Networks and Distributed Systems
- Build intelligent in Distributed Embedded System: Wireless Sensor Network as a case study Amjad Rattrout, Abeer Z'aroor and Azhar Hamdan, (ADS2018). P231, 12th Conference on Advances of Decisional Systems, ISBN: 978-9920-35-679-4
- Towards an ontology-based data access system for aggregated search. Rabhi, A., H. Badir, and A. Rattrout (ADS2018).P419, 12th Conference on Advances of Decisional Systems, ISBN: 978-9920-35-679-4
- Distributed RFID Multi-Agent System for Healthcare Hospitals, Amjad Rattrout, Fadi AbuRob, Hassan Badir, EDA18, RNTI B.14 - ISBN 979-10-96289-08-0, P291
- INTIS2017

2017

- Palestinian Heritage Digitization: A Collaborative Distributed System Approach
- Adaptive User-Centered Application for Cultural Heritage Environments Amjad Rattrout, Shafaq Abulhouf and Kefaya Sabaneh

Supervisor: PhD, and Master thesis

Main and Co-supervisor 4 PhD students in Palestine and Morocco since 2011
 +15 projets M2R (Master of research thesis)
 5 projets Master 1
 4 projets 2^{ème} IUTB of Lyon

Another competence

- Member of Palestinian National Committee of SESAME (2019-now)
- Founder, Chair and co-chair for HIS International conference since 2014
- Founder, Chair and co-chair for INTIS International conference since 2009
- Keynote speaker in many international conferences
- Chair and committee steering member in many international conferences
- Member founder in the association of Palestinian professors in France to create and implement research activities in Palestinian universities, creative and innovation projects in Palestine.
- Jury Member of M2R and M1 Computer science and computer engineering
- Member in many peer journals and conferences; technical and steering committees
- Elaboration and maintain of collaborations and international relations,
- Ability to work in active environments with complex needs - where priorities, capacities and responsibilities are dynamically changing
- Communication skills in English , French, and arabic
- Exceptional interpersonal, organizational, analytical skills
- Detail-orientated and posses excellent multi-tasking and prioritization skills
- Managed complex IT systems

International projects and collaboration:

1. Ak MAqdissi Project A collaborative platform for the management of cultural heritage data, 2016-2018 and 2019-21
2. Coordinator for the TEVET ERASMUS PLUS Project – till now
3. Member in UniGov Erasmus project 2016-2019
4. I.T Projects coordinator and Projects editor, Lyon, France 2006-2012
5. Project editor (TEMPUS, PLUS and CS-MAS).
6. Main coordinator and co-founder for PLUS project 2004-2014(Lyon1 university).
7. Main creator for E-MIAGE project- establishing a master degree in Intelligent web systems, Al Zaytonah University, Jordan
8. Developing Project plan and organizing the Project Life Cycle
9. Strong written/language skills in Arabic, English, and French, whip up professional proposals (on either PowerPoint or in-design)
10. Excellent communications skills and high qualifications in national and International relations
11. Maintain and distribute project information, files, documentation, reports, and related work

12. Coordinate data and information, and prepare internal and external reports from various departments. Prepare status reports which reflect key items such as project health, schedules, risks, and issues.
13. Assist in the analysis of requirements, and preparation of comprehensive outlines for technical documentation.
14. Monitor quality and ensure adherence to established standards.
15. Al Makdissi project (Agent-based Traffic Simulation for more accurate universal traffic simulators) Lyon1, CNAM Paris, An Najah Universities
16. Al Makdissi project (Decision support system for the water management for the city of Nablus and others) Lyon1, CNAM Paris, An Najah Universities
17. Methodology and oriented architecture « Cloud Computing »

International Scientific Collaborations

- Maya RUPERT- Thompson Rivers University, Kamloops, BC, V2C 5N3, Canada.
- William PUECH et ZAFAR shahid Laboratoire LIRMM – projet ICAR, MONTPELLIER.
- Prof Mahmoud Barhamgi, Lyon 1 University
- Berlin University
- Evora University, Portugal
- Hassan BADIR, Ecole Nationale des Sciences Appliquées, ENSA - Tanger, MAROC
- Rachida Fissoune,
- Labib ARAFAH, Electronics and information engineering, Jerusalem, Projet PLUS
- Rashid JAYOUSSI , Faculty of science, Jerusalem, Projet PLUS
- Ali ALDAHOU, Al Zaytonah University, Amman, Jordan, Projet E-MIAGE Jordanie
- Pr Samir AKNIN, GAMA Team, Projet Al Maqdisi
- MC Nadia KABACHI, laboratory ERIC, Université Lyon2,
- Team “Méthodes statistiques de data-mining et apprentissage », laboratory CEDRIC – CNAM, Projet Al Maqdisi
- Team « Modélisation et Méthodes Statistiques Avancées (MMSA) », laboratoire LOCEAN – université de paris 6. Projet Al Maqdisi
- Team «Apprentissage Artificiel & Applications “ LIPN- Université de Paris 13, Projet Al Maqdisi
- An Najah National University, Nablus, (Partners), Projet Al Maqdisi, PLUS

Research and education projects

Project: Decision support system in water management (Municipality of Nablus)

Project PLUS 2014- Present (Palestine Lyon Université Solidaires)

Project: « Cloud Computing » médiation sémantique in mobiles services

*Hassan BADIR, ENSA Tanger, *Amjad RATTROUT, LIRIS, SILEX, France

Project : Traffic management systems : Almaqdisi Project with Lyon1 University and An Najah National University

Project: E-MIAGE master program centre at Al-Quds University

Excelance Project: Smart Hospital system in Palestine, Reward