University of Hail

College of Computer Science and Engineering



Dr. Rejab Mohamed Saleh Hajlaoui

PhD in Computer Science

University of Franche-Comté (UFC) Besançon - France



Research Laboratories



Distributed digital algorithms, mobile networks, intelligent systems and embedded devices

Rejab Hajlaoui

PhD In Computer Science





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https://scholar.google.fr/citations?us er=xKecPEEAAAAJ&hl=fr



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PROFIL

In 2018, I obtained my PhD in Computer Science at the University of Bourgogne-Franche-Comté in France with a "very honorable" mention. My thesis was prepared within the Department of Computing and Complex Systems (DISC) under the direction of Professor Emeritus "Hervé Gyuennet". I did 20 years of teaching. I have taught for more than 20 years. Also, I had an experience of 4 vears at ISITCOM Sousse and ESPITA Sousse., where I teach several courses for engineering students

- 1. IoT
- 2. Cybersecurity
- 3. Medical informatics
- 4. Web Technology and development
- 5. AI

I obtained several certificates listed below in the field of project management, data analysis, cloud and big data.

I have supervised several master's and bachelor's students. Currently I am co-supervising two PhDs. My research focuses on distributed systems, sensor networks, Internet of Things, Cybersecurity and Machine Learning.

Currently I am an Assistant Professor in Artificial Intelligence department at Hail University - KSA

EDUCATION II.

Doctorat in Computer Science (2015 - 2018).

University of Bourgogne-Franche-Comté -

France

Mention: Very Honorable

Master in Computer Science (2005 – 2007)

University of Sfax - Tunisie

Mention: Very good

Bachelor in Computer Science (1998 – 2002)

University of Sfax - Tunisia

Mention: Very good

III. COMPETENCES

1. Programming language

Python, Java, C / C++, Delphi, ASP, Access, Sql, Pascal

2. Tools

Network Simulator NS3, Sumo, Veins, Flash, OMNeT++, Photoshop, Dreamweaver.

3. Design

UML, MERISE 2, O*

4. Operating systems

Windows 95-98-2000-XP and Vista, DOS, Unix, Windows NT Server.

5. Professional software packages

MS Project, MS Visio, MS Office, Flash, Sketchup, Word Press.

IV. PEDAGOGICAL ACTIVITIES

1. Teaching (20 years)

- 1. Secondary education teacher
- 2. Emeritus Senior Professor
- 3. Assistant
- 4. Assistant Professor

Main courses taught

- Decision-making information system.
- OO programming.
- Cyber Security.
- Data base Administration.
- Networking.
- Al.
- Python.
- Computer programming in C.
- · Basics of PHP.
- Web technology

2. Supervising and co supervising

Two doctoral thesis

Two master thesis

Two engineering thesis

Several bachelor thesis

3. Administrative activities

- 2009-2012. Member of the scientific committee. Computer College Hail-KSA.
- 2011 2013: Supervisor of the creation and development committee of the university site Hail KSA.
- 2015-2017: Member of the admissions and registration unit. University of Hail.
- 2015-2018: Supervisor of the student activity unit. Community college- Hail KSA.

4. Certifications and software tools

- **1.** "English Speaking", deanship of communication service & continuing education, Hail KSA. 2016.
- "The Web of Data", Doctoral school, SPIM (Engineering Sciences and Microtechnology). Dijon-France. 2016.
- "Cloud computing and Big Data", IT and Management Training Establishment (EFIG). Sfax-Tunisia. 2016.
- "OMNET++NetworkSimulator", OMNeT Project Company, Kerela, India. 2017.
- 5. "Employment and recruitment: CV, cover letter and interview", Student House. Besançon- France. 2017.
- 6. "Theory and practice in Robotics with Arduino", Professional Training Center Elite School. State approved. Accredited under number: 52-233-19 – Monastir- Tunisia.2021.
- 7. "ISO 31000 risk management", International Standards Certification and Training Group » & ESPITA. State approved. Accredited under number: 2012-01. 2021.
- "Cyber security and blockchain", Med Tech, MedTech - Mediterranean Institute of Technology, Lac2, Tunis. State approved. Accredited under number: B01205752013.
 2021.
- 9. "Creating a professional website with Wordpress", Seondo Training S.A.R.L continuing education organization. State approved, registered under number 51-341-14, Sousse (Tunisia). 2021

5. <u>Development Paradigms</u>

- **1.** "Power BI", Global Engineering & Technology Center. State approved and registered under number 11/1581/17. Lac 2. Tunis, **2021**.
- 2. "Scrum Master", computer engineering, consulting and professional training firm (CIFOP IMS). State approved, registered under number: 11-2/949/10, Tunis. 2021.
- 3. "Scrumfundamentalscertified",

Scrumstudy: global accreditation body for Scrum and Agile certifications. Corporate. Office (Arizona). 2022.

V. SCIENTIFIC ACTIVITES

1. Publications in journal

Q1

- 2. R. Hajlaoui, T. Moulahi, H. Guyennet, "A survey on Heuristic-based Routing Methods in Vehicular Ad-Hoc Network: Technical challenges and future trends", IEEE Sensors Journal, Vol 16, Issue 17, June 2016. IF: 3.076.
- 3. E. benmohamed; A. Thaljaoui; R. Hajlaoui; S. khediri and T. Moulahi, "IIDS: Intelligent Network Intrusion Detection System using Optimized Deep CNN-LSTM with UNSW-NB15", Sustainable Cities and Society Journal, 2023, IF=7.587 (Submitted).

Q2

- 4. R. Hajlaoui, E. Alsolami, T. Moulahi, H. Guyennet, "An Adjusted K-medoids Clustering Algorithm for Effective Stability in Vehicular Ad Hoc Networks", International Journal of Communication Systems, 2019. Wiley IF: 1.717.
- R. Hajlaoui, E. Alsolami, T. Moulahi, H. Guyennet, "Construction of a stable vehicular ad hoc network based on hybrid genetic algorithm", Telecommunication systems Journal, 2018. Springer, IF: 1.527.
- 6. A. Mchergui, R. Hajlaoui, T. Moulahi, A. abdulatif, L. Pascal, I. Celestine and S.Shahab, "Steam Computing: a Novel Paradigm for Cross-layer Solutions over Cloud, Fog and Edge Computing", IET Wireless Sensor Systems,

2023, IF=2.51

7. R. Hajlaoui, S. Mahfoudhi, T. Moulahi, N. Allheeib and N. Almusallam, "Sustainable Machine Learning Systems with Blockchain: A Comprehensive review and open issues", Sustainability journal (Submitted)

Q3

8. R. Hajlaoui, S. Mahfoudhi, T. Moulahi *, N. Allheeib*, N. Almusallam, "Blockchain for machine learning vulnerabilities tackling: An overview, open issues and future trends ", Applied Sciences Journal, IF=2.7 (submitted)

- 9. R. Hajlaoui, S. Touil, W. Achour, "O-DSR: Optimized DSR routing protocol for mobile ad hoc network", International Journal of Wireless & Mobile Networks (IJWMN) Vol. 7, No. 4, August 2015
- R. Hajlaoui, Mariem Gzara, Abdelaziz

Dammak, "Hybrid model for solving multiobjective problems using evolutionary algorithm and tabu search", World of Computer Science and Information Technology Journal (WCSIT), 2011.

1. Communications in conferences

- 1. R. Hajlaoui, T. Moulahi, H. Guyennet, "A Scatter Search based Heuristic for Reliable Clustering in Vehicular Ad Hoc Networks", AIAI 2018: 14th Artificial Intelligence Applications and Innovations conference, Rhodes, Greece, 2018. (Springer IFIP) Class B.
- 2. T. Moulahi, H. Guyennet, R. Hajlaoui, S. Nasri, "On the Construction of Load-Balanced (k,rhop)-Connected Dominating Set for WSNs, IEEE Int. Conf. on Advanced Networks and Telecommunications Systems, Bengalore, India, December 2012. (IEEE Xplore)., 2012. Class B
- 3. R.Hajlaoui, B.Alaya and A. Mchergui, "Optimized VANET routing protocol using cuckoo search algorithm", International Wireless Communications and Mobile Computing Conference (IWCMC 2022) Class B
- 4. A. Mchergui, R. Hajlaoui and S. Elkhediri, "Paving the Way to Distributed Artificial Intelligence: Applications and Challenges", 5th Conference on Cloud and Internet of Things, Marrakech Morocco, (Submitted) DBLP
- 5. L. Sellami, R. Hajlaoui and B. Alaya, "An intelligent and efficient method for confidentiality and security managing of vehicular networks", International Wireless Communications and Mobile Computing Conference (IWCMC 2022) ClassB

6. R. Hajlaoui, T. Moulahi, H. Guyennet,

"Vehicular ad hoc networks: From simulations to real-life scenarios", IEEE, International Conference on Communication, Management and Information Technology, Poland, 2017.

3. Scientific influence

3.1. Reviewing

2017- 2020. International Journal of Communication Systems. Wiley.

2017 - 2020: PLOS ONE Journal. PLOS

2015-2020: Journal of ad hoc & sensor wireless networks, OldCity.

2022: Advances in Science, Technology and Engineering Systems Journal (ASTESJ)

3.2. Editorial board membership

International Journal of Computer Science and Information Security (IJCSIS).

3.3. Internships

2002: MIRACL Laboratory – FSEG – SFAX. Tunisia (2 months).

2017: DISC Laboratory, Institute FEMTO-ST, Besancon, France (3 months).

2018: DISC Laboratory, Institute FEMTO-ST, Besancon, France (3 months).

2019: DISC Laboratory, Institute FEMTO-ST, Besancon, France (3 months).

2021: BravoByte Entreprise, internet marketing service. 4051 Av. Jalloul Ben Cherifa, Sousse. Tunisia (4 months).

3.4. Scientific distinction

Best paper (Winning first prize)

R. Hajlaoui, M. A. Elashiri and A. S. Almahairah, "Improving the Measurement of Learning Outcomes

using the Ranking of Objectives in the Rubric Scale",

CONTACTES

The following people agreed to be contacted to give their opinion on my candidacy.

1. Hervé Guyennet,

Emeritus Professor, University of Bourgogne - Franche-Comté, France).

E-mail: <u>herve.guyennet@femto-st.fr</u>

Tel: (+33) 6 67 69 74 48

2. Salem Nasri

Professor, National School of Engineers of Monastir – Tunisia.

E-mail: salemnasri@yahoo.fr

Tel: (+216) 99 45 73 52

3. Tarek Moulahi,

Assistant Professor, MIS department, CBE, Qassim University, Saudi Arabia.

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