

Curriculum vitae

Name : First name :	SOUIDI MOHAMMED EL HABIB
Grade :	Associate professor in Computer Science
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Address professional :	Abbès University Laghrour of Khenchela Department of Mathematics Computer Science Laboratory: Knowledge Engineering and Computer Security (ICOSI)) Khenchela , 40004. Algeria.
Date and place of birth: 17-10-1989 (Oran –Algeria-)	
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1. TRAINING

- 2008 : Baccalaureate Natural Science, CHIHANI BACHIR High School, Khenchela , Algeria.
- 2008-2009 : Mathematics and Computer Science, Abbès University Laghrour, Khenchela, Algeria.

2008-2011: Bachelor's degree in General Computer Science, Abbes University Laghrour, Khenchela, Algeria.

2011-2013: Master in Fundamental and Applied Computer Science, Abbès University Laghrour, Khenchela, Algeria.

- 2013: Winner of the national scholarship competition abroad, Constantine, Algeria.
- 2013-2017: PhD in Computer Science, Harbin Institute of Technology, Harbin, China.
- 2017 2018: Training in ICT and teaching practices, Center for distance learning, University of Constantine 1, Algeria.
- 2021: Accreditation to Direct Research (University of Oum Bouaghi)

DEFENDED THESES and DISSERTATIONS

- **SOUIDI MEH**. (2011). License thesis, University of Khenchela, Algeria. "Simulation of the coherence of data distributed on the P2P network based on the NS2 simulator". **SOUIDI MEH**. (2013). Master's thesis, University of Khenchela, Algeria. "Proposal of a flexible organizational model for multi-agent systems". 2.
- **SOUIDI MEH.** (**2017**). Doctoral dissertation, Harbin Institute of Technology , Harbin, China. "MULTI-AGENT PURSUIT-EVASION BASED ON COORDINATION MECHANISMS ". 3.

3. EDUCATIONAL & EDUCATIONAL ACTIVITIES RESEARCH

3.1. TEACHINGS INSURED

- Expert System
- XML programming
- Electronics, and System Components
- Human Machine Interface
- Compilation
- Structure Machine 2
- MATLAB
- Numerical calculations
- Introduction to computers
- Computer science 2
- Knowledge representation
- JEE Platform
- Distributed Artificial Intelligence
- <u>2017-2018 :</u>
 - * TP: Compilation & Human-Computer Interface 3rd year computer system.
 - Practical work: MATLAB 2nd Year Master in Materials Physics.
 - Practical work: Numerical Calculations 2nd year Chemistry License,
 - Tutorial: Electronics, and Systems Components 1st year Mathematics and Computer Science
 - Tutorial: Introduction to Computer Science 1st year Economics License.
- <u>2018-2019:</u>
 - Course/TD/TP: Expert System 1st Year Master in Web Security and Technology.
 - Course/TP: XML Programming 1st Year Master in Web Security and Technology.
 - Tutorial: Electronics, and Systems Components 1st year Mathematics and Computer Science.
 - Tutorial: Structure Machine 2 1st year Mathematics and Computer Science.
- <u>2019-2020 :</u>
 - Course/TD/TP: Expert System 1st Year Master in Web Security and Technology.
 - Course/TP: XML Programming 1st Year Master in Web Security and Technology.
 - Course/TD: Electronics, and System Components 1st year Mathematics and Computer Science.
 - Practical work: Computer science 2 1st year Material Science.
- <u>2020-2021 :</u>
 - Course/TD/TP: Expert System 1st Year Master in Web Security and Technology.
 - Course/TP: XML Programming 1st Year Master in Web Security and Technology.
 - Course: Electronics, and Systems Components 1st year Mathematics and Computer Science.
- <u>2021-2022 :</u>
 - Course/TD/TP: Expert System 1st Year Master in Web Security and Technology.
 - Course/TP: J2EE and web development 1st year Master in Web Security and Technology.
 - ✤ Course/TP: J2EE 1st Year Master GLSD Platform.
 - Course: Electronics, and Systems Components 1st year Mathematics and Computer Science.
- <u>2022-2023 :</u>
 - Course/ TD: Representation of knowledge 1st year Master in Web Security and Technology.
 - Course/TP: J2EE and web development 1st year Master in Web Security and Technology.
 - ✤ Course/TP: J2EE 1st Year Master GLSD Platform.
 - Course: Electronics, and Systems Components 1st year Mathematics and Computer Science.
- <u>2023-2024 :</u>
 - Course/ TD: Representation of knowledge 1st year Master in Web Security and

Technology.

- Course/TP: J2EE and web development 1st year Master in Web Security and Technology.
- ✤ Course: Distributed Artificial Intelligence 1st Year Master AI.
- Course: Electronics, and Systems Components 1st year Computer Science.

3.2. FRAMES OF MEMORIES OF END STUDY LICENSES

• Design and implementation of a university teacher management application. **Specialty** : *Bachelor's degree in Computer Systems 2017/2018*.

3.3. SUPERVISIONS OF MASTERS THEMES IN COMPUTER SCIENCE

- 1. Proposal of a task coordination mechanism for MAS based on game theory. **Speciality** : *Master in Security and Web Technology 2018/2019*.
- 2. Proposal of a trajectory planning algorithm for SMAs based on reinforcement learning. **Speciality :** *Master in Security and Web Technology 2019/2020.*
- 3. Towards a new organizational model based on Neural Networks for Multi Agent Systems. **Speciality** : *Master in Security and Web Technology 2020/2021*.
- 4. The Proposal of a New Multi-Agent Access Mechanism Based on the Fairness Principle. **Speciality :** *Master in Security and Web Technology 2021/2022.*
- 5. Towards New Trajectory Planning for Multi-Agent Systems. **Speciality** : *Master GLSD 2021/2022*.
- 6. Proposal of an algorithm for generating a timetable based on Particle Swarm Optimization. **Speciality** : *Master in Security and Web Technology 2022/2023*.
- 7. Multi-agent collaboration for the detection of objective zones based on particles swarm optimization . **Speciality :** *Master GLSD 2022/2023*.

3.4. SUPERVISION DURING LMD DOCTORATE THESES IN COMPUTER SCIENCE

- **1. LAASSAMI FERIAL**, "Towards a new task coordination mechanism for multi-agent systems based on a metaheuristic approach"
- **2. Boudjidj Abdelghani**, " Category Theory for the Organizational Modeling of Multi-Agent Systems."

3.5. CO-SUPERVISION DURING LMD DOCTORATE THESES IN COMPUTER SCIENCE

- 3. SID NABILA ., "Proposal of a coalition formation algorithm for multi-agent systems"
- 4. SABEG SAMRA ., "Formal models for the design of Multi-Agent Systems"
- **5. SAFIR SAMIR** ., "An organizational multi-agent approach for the design of ambient intelligence systems"

3. PUBLICATIONS AND COMMUNICATIONS INTERNATIONAL

- 3.1. Newspapers and magazines with impact postman (Category A)
- 1. SOUIDI, Mohammed El Habib, LEDMI, Makhlouf, MAAROUK, Toufik Messaoud, *et al.* Multi-Agent Dynamic Leader-Follower Path Planning Applied to the Multi-Pursuer Multi-Evader Game. *Computing and Informatics*, 2023, vol. 42, no. 5, p. 1158–1183-1158–1183.
- 2. SOUIDI, Mohammed El Habib, MAAROUK, Toufik Messaoud, LEDMI, Makhlouf, *et al.* Multi-Pursuer Multi-Evader Games Based on Dynamic Elimination Priorities of the Dominated Strategies. *Journal of Computer and Systems Sciences International*, 2023, p. 1-14.
- **3. SOUIDI, Mohammed El Habib**, HAOUASSI, Hichem, LEDMI, Makhlouf, *et al.* A discrete particle swarm optimization coalition formation algorithm for multi-pursuer multi-evader game. *Journal of Intelligent & Fuzzy Systems*, 2023, no Preprint, p. 1-17.
- 4. SID, Nabila, DJEZZAR, Meriem, SOUIDI, Mohammed El Habib, *et al.* New Game-Theoretic Convolutional Neural Network Applied for the Multi-Pursuer Multi-Evader Game. *Computing and Informatics*, 2023, vol. 42, no. 3, p. 546–567-546–567.
- **5.** RAHAB, Hichem, HAOUASSI, Hichem, **SOUIDI, Mohammed El Habib**, *et al.* A modified binary rat swarm optimization algorithm for feature selection in Arabic sentiment analysis. *Arabian Journal for Science and Engineering*, 2023, vol. 48, no. 8, p. 10125-10152.
- 6. Maarouk, Toufik Messaoud, and Mohammed El Habib SOUIDI Nadia HOGGAS. "Formalization and Model Checking of BPMN Collaboration Diagrams with DD-LOTOS." *Computing & Informatics* 40.5 (2021).
- 7. SOUIDI, Mohammed El Habib, SONGHAO, Piao, GUO, Li, *et al.* Multi-agent cooperation pursuit based on an extension of AALAADIN organizational model. *Journal of Experimental & Theoretical Artificial Intelligence*, 2016, vol. 28, no. 6, p. 1075-1088.
- 8. SOUIDI, Mohammed El Habib and PIAO, Songhao . A new decentralized approach of multiagent

cooperative pursuit based on the iterated elimination of dominated strategies model. *Mathematical Problems in Engineering*, 2016, vol. 2016.

- **9. SOUIDI, Mohammed El Habib**, SIAM, Abderrahim, and PEI, Zhaoyi . Multi-agent pursuit coalition formation based on a limited overlapping of the dynamic groups. *Journal of Intelligent & Fuzzy Systems*, 2019, vol. 36, no. 6, p. 5617-5629.
- PEI, Zhaoyi , PIAO, Songhao , SOUIDI, Mohammed El Habib , et al. Coalition Training for Multi-agent Pursuit Based on Neural Network. *Journal of Intelligent & Robotics Systems*, 2019, vol. 95, no. 3-4, p. 887-899.
- **11.** PEI, Zhaoyi , PIAO, Songhao , **SOUIDI, Mohammed El Habib** , *et al.* SLAM for Humanoid Multi-Robot Active Cooperation Based on Relative Observation. *Sustainability* , 2018, vol. 10, no. 8, p. 2946.
- **12.** Qadir, MZ, Piao, S., Jiang, H., & **Souidi , ME** H. (2020). A novel approach for multi-agent cooperative pursuit to capture grouped evaders. *The Journal of Supercomputing* , *76* (5), 3416-3426.
- 3.2. Journals and journals indexed Scopus and Engineering Index EI (Category B)
 - **1.** MAAROUK, Toufik Messaoud, **SOUIDI, Mohammed El Habib**, LEDMI, Makhlouf, *et al.* Formalization of BPMN Gateways using the DD-LOTOS Formal Language. *Journal of Communications Software and Systems*, 2023, vol. 19, no. 4, p. 254-263.
 - 2. LEDMI, Makhlouf, SOUIDI, Mohammed El Habib, HAHSLER, Michael, *et al.* Mining association rules for classification using frequent generator itemsets in arules package. *International Journal of Data Mining, Modeling and Management*, 2023, vol. 15, no. 2, p. 203-221.
 - **3.** BOUDJIDJ, Abdelghani, MERAH, Elkamel, and **SOUIDI, Mohammed El Habib**. Towards a formal multi-agent organizational modeling framework based on category theory. *Informatica*, 2021, vol. 45, no. 2.
 - **4. SOUIDI, Mohammed El Habib**, PIAO, Songhao, LI, Guo, *et al.* Coalition formation algorithm based on organization and Markov decision process for multi-player pursuit evasion. *Multiagent and Grid Systems*, 2015, vol. 11, no. 1, p. 1-13.
 - **5. SOUIDI, Mohammed El Habib**, PIAO, Songhao, and LI, Guo. Mobile agents path planning based on an extension of Bug-Algorithms and applied to the pursuit-evasion game. In: *WebIntelligence*. IOS Press, 2017. p. 325-334.
 - 6. SOUIDI, Mohammed El Habib, SIAM, Abderrahim, PEI, Zhaoyi, *et al.* Multi-Agent Pursuit-Escape Game Based on Organizational Architecture. *Journal of computing and information technology*, 2019, vol. 27, no. 1, p. 1-11.
- 3.3. International conferences with proceedings (with ISBN) and committee of reading
- 1. SABEG, Samra , MAAROUK, Toufik Messaoud, and **SOUIDI, Mohammed El Habib** . Formal Specification and Verification for Organization-based systems: A Survey. In: 2022 4th International Conference on Pattern Analysis and Intelligent Systems (PAIS) . IEEE, 2022. p. 1-6.
- 2. Abdeldjalil , LEDMI, Makhlouf , and SOUIDI, Mohammed El Habib . Fault Tolerance in Cloud Computing: A Survey. In: 2021 International Conference on Recent Advances in Mathematics and Informatics (ICRAMI) . IEEE, 2021. p. 1-6.
- **3.** LEDMI, Makhlouf , LEDMI, Abdeldjalil , and **SOUIDI, Mohammed El Habib** . Classification of XML Documents Using Semantic Resources. In: 2021 International Conference on Recent Advances in Mathematics and Informatics (ICRAMI) . IEEE, 2021. p. 1-5.
- 4. SIAM Abderrahim, **SOUIDI Mohammed El Habib**, and SAFIR Samir. A MULTI-AGENT SYSTEM FOR GENERATION OF UNIVERSITY TIME SCHEDULES.8th International Conference on Advanced Computer Science and Information Technology (ICAIT 2019),At : March 30-31, 2019, Zurich, Switzerland.
- **5. SOUIDI, Mohammed El Habib**, Toufik Messaoud Maarouk, and Abdeldjalil Ledmi. Multiagent Ludo game collaborative path planning based on Markov decision process. 5th International Conference on Inventive Systems and Control (ICISC 2021).At: 7-8 January 2021, Coimbatore, India.

5. AREAS OF INTEREST

- Distributed Artificial Intelligence,
- Multi-agent systems,
- Task coordination mechanisms,
- Centralized and decentralized movement planning algorithms,
- Game Theory,
- Obstacle avoidance algorithms,
- Machine learning,
- Multi-agent games and simulation,
- The Markov Decision Process and Reinforcement Learning,

- 6. LANGUAGES PRACTICED
 Arab, French, English : Perfectly Read, And written,
 Chinese : Moderately spoken.