

Curriculum Vitae

Dr. SOFIA KOUAH

Personal information

- **Personal**
 - First Name: Sofia
 - Last Name: Kouah
 - Nationality: Algerian
 - Position: Lecturer of Computer Science at the University of Oum El Bouaghi, Algeria.
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- **Researcher identity**
 - Google Scholar: <https://scholar.google.com/citations?user=U1wjJp4AAAAJ&hl=fr&oi=ao>
 - ResearchGate: <https://www.researchgate.net/profile/Sofia-Kouah>
 - ORCID: 0000-0002-1538-5543

Education

- HDR degree in Computer Science (Accreditation to Supervise Research), University of Oum El Bouaghi, Algeria. 2020.
- Ph.D. degree in in Computer Science (Doctorate of Science), University of Constantine 2, Algeria. 2016.
- M. Sc. degree in Computer Science (Magister), Information & Computation Option, University of Oum El Bouaghi, Algeria. 2007.
- BEng degree in Computer Science, Parallel and Distributed Systems option, University of Constantine 2, Algeria. 2003.
- Baccalaureate degree, Mathematics Option, El Khroub, Constantine 2, Algeria. 1997.

Functions and Affiliations

- Associate Professor A. University of Oum El Bouaghi, Algeria. July 12, 2020 – Now.
- Associate Professor B. University of Oum El Bouaghi, Algeria. February 03, 2016 –July 11, 2020.
- Assistant Professor. University of Oum El Bouaghi, Algeria. October 01, 2012 – February 02, 2016.
- Assistant Professor. University of Tebessa, Algeria. September 08, 2007– September 30, 2012.

Teaching modules

- **At University of Tebessa, Algeria:**
 - Software Engineering 2 (Course), 4th Year Engineer in Computer Science.
 - Experts Systems (Course), 4th Year Engineer in Computer Science.

- UML 2 (Course), 3rd Year License in Computer Science.
- Formal Description Methods: LOTOS (Course), 3rd Year License in Computer Science.
- Multi Agents Systems (Course and Practical work), 1st Year Master I. S.
- Algorithmic and Data Structures (Directed work), 2nd Year License in Computer Science.
- Algorithmic 1 & Algorithmic 2 (Directed work and Practical work), 1st Year M.I. & M.S.
- Informatic, Practical work in Pascal; 1st Year Material Science.
- ***At University of Oum El Bouaghi:***
 - Object-Oriented Analysis and Design, 3rd Year in Computer Science License, ISIL option.
 - Software Engineering 2 (Course, Directed work and Practical work), 3rd Year Licence in Computer science, option I.S.
 - Distributed software engineering (Course, Directed work and Practical work), 1st Year Master, Distributed Architectures option.
 - Mobil Applications (Course, Directed work and Practical work). 3rd Year Licence in Computer Science, option I. S.
 - Software Engineering (Course, Directed work and Practical work), 3rd Year Licence in Computer science, option I. S.
 - Constraint Programming (Course, Directed work and Practical work), 1st Year Master, Distributed Architectures option.
 - Programming & Data Structures (Course, Directed work and Practical work), 1st Year License, M.I.
 - Informatic: introduction to office automation, internet, databases, Windows 7 for 1st et 2nd Year License in Law, 1st et 2nd Year Master in Law and Political Science.
 - Informatic: Computers: introduction to office automation, internet, databases, Windows 7 for 1st year License and 1st et 2nd year Master, Political Sciences.

International publications

- ***Chapter Book***
 - Kouah Sofia, Saïdouni, Djamel Eddine. (2017). Fuzzy Labeled Transition Refinement Tree: Application to Stepwise Designing Multi Agent Systems. In I. Management Association (Ed.), Fuzzy Systems: Concepts, Methodologies, Tools, and Applications (pp. 873-905). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-1908-9.ch039.
- ***Journal Publications***
 - Kouah Sofia, Saïdouni Djamel Eddine & Ilié Jean Michel. Synchronized petri net: A formal specification model for multi agent systems. Journal of Software, 2013, vol. 8, no 3, p. 587-602.
 - Kouah Sofia, Saïdouni Djamel-Eddine. Fuzzy Labeled Transition Refinement Tree: Application to Stepwise Designing Multi Agent Systems. International Journal of Agent Technologies and Systems (IJATS), 2014, vol. 6, no 3, p. 1-31.
 - Kouah Sofia, Saïdouni Djamel Eddine. Application of Fuzzy Labeled Transition System to Contract Net Protocol; International Journal of Service Science, Management, Engineering, and Technology (IJSSMET), 2015, Volume 6, Issue 3. P.29-49.
 - Kouah Sofia, Saïdouni Djamel Eddine & Kitouni Ilham. Open Fuzzy Synchronized Petri Net: Formal Specification Model for Multi-agent Systems. Special Issue: The Impact of Fuzzy Set and Intuitionistic Fuzzy Approaches in Relation to Organizational Decision Making. International Journal of Intelligent Information Technologies (IJIIIT), Mars 2016.
 - Kouah Sofia, Saïdouni, Djamel Eddine. (2017). Fuzzy Labeled Transition Refinement Tree: Application to Stepwise Designing Multi Agent Systems. In I. Management Association (Ed.),

Fuzzy Systems: Concepts, Methodologies, Tools, and Applications (pp. 873-905). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-1908-9.ch039.

- Kouah Sofia & Kitouni Ilham. Multi-Layer Agent Based Architecture for Internet of Things Systems. Journal of Information Technology Research (JITR), 2018, vol. 11, no 4, p. 32-52. 2018
- **Conference Papers**
- Kouah Sofia, Kitouni Ilham & Saïdouni Djamel Eddine, Towards Agent oriented Methodology: A Fuzzy based formal refinement approach for Multi agent systems. The International Conference on Engineering & MIS 2015. Istanbul, Turkey, 24-26 September, 2015.
- Kouah Sofia, Saïdouni Djamel Eddine & Kitouni Ilham. Fuzzy Labeled Transition System Vertical Bisimulation. 2015 6th IEEE International Conference on Software Engineering and Service Science (ICSESS 2015) September 23-25, 2015. Beijing, China.
- Kouah Sofia, Saïdouni Djamel Eddine & Kitouni Ilham. Top-Down Relations on Fuzzy Labeled Transitions System. « First International Conference on New Technologies of Information and Communication ». NTIC 2015, Mila, Algeria. November 8-9 2015.
- Kouah Sofia & Kitouni Ilham. Internet of Things Agents Diagnosis Architecture: Application to Healthcare IoT System. 3rd International Conference on Advanced Aspects of Software Engineering (ICAASE'18). Constantine 2 University, on December 01-02, 2018.
- Kouah Sofia & Kitouni Ilham. Towards Fuzzy Partial Global Fault Diagnosis. International Conference on Information Technologies: Information and Communication Technologies for Research and Industry ICIT-2019, February 7-8, 2019. Saratov, Russia.

Interests and Qualifications

- **Interests:** Software Engineering, Formal Methods, Multi Agent Systems, Distributed Systems, Internet of Things, Distributed Artificial Intelligence, Diagnostic, Machine Learning and Deep Learning Algorithms.
- **Qualifications :** Java, Pascal, C, Prolog, ChocoSolver, Weka, JADE, JFuzzyLogic, Python, Protégé 2000, FOCOVE, UPPAAL. Internet of Things Development (Prototype & Programming), Arduino, Mobil Application under Android Studio, RMI & sockets in Java. Modelio.