

## Special Session on Fuzzy Reactive Computational Intelligence : Theory and Applications

### Scope and motivation

The reactive and fuzzy computer intelligence (FRCI) is aligned with the precepts of the reactive manifesto and deeply includes artificial intelligence principles. Using the problem-solving processes of Fuzzy Set Theory, she was able to develop mechanisms that we believe could effectively improve current Artificial Intelligent systems, offering much more flexibility and providing support than a theory of intelligent reactive systems (intelligent, responsive, resilient, elastic, message-driven). The relevance of this approach is demonstrated in several applications such as : intelligent transportation systems, smart mobility, distributed intelligence, etc. Papers to be submitted should consider the reactive computational intelligence with uncertainty modeling in decision making and industrial engineering fields to provide new insights for both academia and industry environments. New research directions needed to further develop the FRCI approach are also encouraged.

### Interest of Special Session

Relevant topics for Special Session include (but are not limited to) the following :

- Reactive Intelligent Environments
- Intelligent microservices and complexe event processing
- Distributed Intelligent Algorithms
- Distributed services
- Distributed Intelligent Information Systems
- Cloud Computing, Edge Computing, Fog Computing
- Distributed Systems
- Real Time Intelligent Systems
- Fuzzy mobile computing
- Distributed applications ICTs: medicine, industry, transportation systems, IoT, IoV, etc...

### Important Dates

Abstract submission deadline : **Jan.17, 2020.**

Full paper submission deadline : **March 1, 2020**

Notification of acceptance: **April 3, 2020**

Camera-ready paper submission: **April 17, 2020**

Deadline of author late registration for paper publication in proceedings: **April 17, 2020**

Conference: **July 21-23, 2020**

### Contact Information

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### Organizers

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### Paper Submission

All papers accepted for the Special Session will be appeared in the INFUS 2020 proceedings (published as a book by the Springer and is indexed in Scopus).The authors are required to submit their papers to the Special Session following the steps below:

- Submission by INFUS 2020 EasyChair Account indicating the name or the code of the Special Session.
- Inform the Special Session Chairs about your submission including the title of paper, author list and affiliation, and the corresponding author.

The session chairs are responsible for the review process of the papers submitted to their sessions via the EasyChair. These papers will be peer reviewed by at least two reviewers.

### About the Conference

INFUS is an acronym for Intelligent and Fuzzy Systems. It is a well-established international research forum to advance the foundations and applications of intelligent and fuzzy systems, computational intelligence, and soft computing for applied research in general and for complex engineering and decision support systems. The principal mission of INFUS is bridging the gap between fuzzy & intelligence systems and real complex systems via joint research between universities and international research institutions, encouraging interdisciplinary research and bringing multidiscipline researchers together. INFUS 2020 proceedings will be published as a **book by Springer under "Advances in Intelligent Systems and Computing Series"** and will be indexed in Scopus.

Moreover, special issues of indexed journals will be devoted to a strictly refereed selection of extended papers presented at INFUS 2020.

### The journals with publication potential include:

- International Journal of Computational Intelligence Systems (SCI-E),
- Journal of Multiple-Valued Logic and Soft Computing (SCI-E),
- Recent Patents on Engineering (Scopus, EI/Compendex, EBSCO),
- International Journal of Intelligent Computing and Cybernetics,
- International Journal of Risk Analysis and Crisis Response (DOAJ).

## Brief biographical information of the organizers

### Pr Azedine Boulmakoul

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Azedine Boulmakoul is a Professor in the Department of Computer Science at FST Mohammeda - Hassan II University of Casablanca, where he has been since 1994. He received his PhD and hold « Habilitation à Diriger des Recherches » from the Claude Bernard University of Lyon in 1990 and 1994 respectively. In 1987, he was lecturer assistant at the ENTPE School (Ecole Nationale des Travaux Public de l'Etat Lyon France). For the period 1987-1988, he was appointed Assistant Professor at INSA de Lyon. Between 1987 and 1994, he joined the National Institute for Research on Transportation and Safety (INRETS-Paris, [www.ifsttar.fr](http://www.ifsttar.fr)) for Real Time intelligent systems' research development. He is President of Innovative Open Spatial Information Systems Association : [www.iosis.ma](http://www.iosis.ma). He has received many awards for his contributions to research and business development, including French Academy of Sciences, R&D Maroc Awards and Distinction Medal from Moroccan Ministry of Higher Education and Research, Distinction Medal from Istanbul International Inventions. He also contributes to intellectual property of industrial patents. Several years in R&D and in studies and business consulting. He has chaired several conferences and program committees. He is the author of over three hundred papers (in books, journals and conferences, patents, ..) on computer science. He holds ten patents deriving from his research. His research interests include intelligent real time systems, logic for artificial intelligence, fuzzy systems theory, distributed frameworks, data analytics, complex systems, information systems engineering, transportation and computer engineering. In his spare time he enjoys playing karate (3rd degree black belt), running, cooking, and reading. Amazed by universe beauty and likes to walk in mountains and listen to silence to write a poem.

### Pr Ahmed Lbath

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Ahmed Lbath is Full Professor of Computer Science at Grenoble Alpes University (UGA) in Grenoble, France. He received a PhD in computer science from the University of INSA Lyon and hold an « Habilitation à Diriger des Recherches » from the University of Lyon. He is member of the Board of Trustees of the University of Grenoble, and President of the Finance Committee. He is Associate at the French Embassy of the United States at the Department of Science and Technology. He is also former Deputy Director of National Institute of Technology, former Head of the Department of Communication Networks and Services. He has served as Director of R&D Department in a French company. He is leading research program at MRIM/LIG research Lab. He carried out research activities as Visiting Professor at ITL Lab, Washington Dc Metro, USA where he is conducting research collaboration and co-supervising PhD students. He is also acting as project manager coordinating scientific collaborations in the domain of Cyber Physical Systems and Smart Cities. His research interests include cyber physical social systems, pervasive computing, web services, knowledge dissemination and recommendation systems, mobile tourism, GIS, UML modeling and software engineering. His research activities focus on the development of new framework in order to customize location based applications and mobile software such as mobile tourism applications. He also has proposed and implemented a patented CASE tool for Open Standards and Interoperable geomatic applications (AIGLE). He also has invented a system and framework for developing context aware mobile services named MOBI-S. He published different papers in books, journals and conferences and he regularly acts as a reviewer for international conferences, journals and research programs. He is co-chair and/or member of several committees of International conferences. He is the local coordinator in Grenoble of several international projects such as Erasmus-Mundus and received innovation award from the ministry of research and high education.

### Pr Lamia Karim

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Lamia Karim is a professor of computer science at the National School of Applied Sciences Berrechid (ENSAB) Hassan I University. In 2015, she obtained the PhD degree in Computer Science at the Faculty of Science and Technology of Mohammeda, Hassan II University of Casablanca, Morocco. She obtained Masters of Science and Technical in computer Sciences in 2006 from Faculty of Sciences and Technologies (FSTM), Morocco, and computer engineer degree in software engineering from National School of Mineral Industry (ENIM), Rabat, Morocco in 2008. Her research interest includes spatial data engineering, mobile and web geo-computing, real time intelligent transportation systems, complexes systems computing, soft computing, reactive intelligent systems.