The 2nd international workshop on Intelligent Internet of Things and Applications (AIoT 2022) Under the umbrella of

International Semantic Intelligence Conference ISIC 2022

Workshop Chairs:

<u>Prof. Richard CHBEIR</u>, Full Professor in Computer Science, Head of LIUPPA Laboratory, University Pau & Pays de l'Adour (UPPA laboratory), Anglet, 64600, France

Email: rchbeir@acm.org, richard.chbeir@univ-pau.fr

Dr. Salma Sassi, Associate Professor in Computer Science, University of Jendouba (VPNC

Laboratory), Jendouba, 8100, Tunisia

Email: salma.sassi@fsjegj.rnu.tn

Dr. Anis Tissaoui, Associate Professor in Computer Science, University of Jendouba (VPNC

Laboratory), Jendouba, 8100, Tunisia **Email**: anis.tissaoui@fsjegj.rnu.tn

Introduction

Artificial Intelligence & the Internet of Things (IoT) are the latest trending technology making society - changing in many fields especially in industries like Manufacturing, Automation, Healthcare, Energy, Transport, Defence, Space, Data Mining, Elder Care, etc. AI & IoT, are opening a wide set of new opportunities, both for novel services/applications and increased efficiency/scalability. These opportunities include locally sharing information, collaborating, generating/consuming a huge amount of data, and learning from a massive amount of data in real-time to quickly identify newly emerging unknown patterns. Indeed, distributed big data analytics, modern Machine Learning (ML) technology, Artificial Intelligence (AI), real-time data collection and processing, scalable and distributed security solutions such as blockchain, and distributed secure data processing, may play a significant role.

However, successful decision-making needs to combine the best qualities of both human and Digital knowledge. To do so, it is capital to structure any type of relevant and reliable knowledge and incorporate it as part of decision analytics Indeed, there is increasing recognition of utilizing knowledge whenever available or can be created purposefully. This includes contextual and organizational information that analytics by itself does not provide.

This workshop aims to demonstrate the indispensable role of business data and methodological know-how in helping decision-making and how to use and exploit the prior knowledge to enhance data analytic for autonomous decision-making.

We hence encourage original paper submissions, which have not been published or submitted for publication elsewhere, from both academia and industry presenting novel research addressing the aforementioned challenges.

We are seeking both conceptual and empirical papers offering new insights and contributions to the development of data analytic algorithms and systems for autonomous

decision-making, which focus on the following topics (but are not limited to) which demonstrate the role of exploiting the knowledge to enhance data analytics:

- Enhancing the capability in handling uncertainty;
- Enhancing transparency, interpretability, and explainability;
- Reducing the complexity of model architecture in time and space;
- Enhancing the capability to avoid social discrimination and unfair treatment;
- Enhancing automated decision-making capability and performance;
- Enhancing reliability and integrity of data analytics.

Publication: All accepted and presented papers will be included in Proceedings and submitted to *Central European Workshop Proceedings (CEUR-WS)* for online publication.

Indexing: Post-conference workshop, the CEUR-WS proceedings will be made available to the following indexing services- Scopus, Scimago Journal & Country Rank, DBLP, and Google Scholar.

Submission Guidelines: Prospective authors should submit a *regular paper* with at least 10 pages or a *short paper* with 5-9 pages (1 standard page = 2500 characters) and an appropriate number of references in the workshop track through the EasyChair conference submission system (https://easychair.org/conferences/?conf=aiot2022). The manuscript must be *original*, i.e. not published or submitted in parallel to any workshop or conference or a journal. You can download an offline version with the style files and workshop paper format from: http://ceur-ws.org/Vol-XXXX/CEURART.zip

Important Dates:

Full Paper Submission: 31th March 2022
 Paper Acceptance Notification: 5th April 2022
 Workshop Registration: 10th April 2022
 Camera Ready Paper: 10th April 2022
 Main Conference: 17-19 May 2022

Note: In case of any query, kindly reach out to any workshop chair.