RIF 2024

The 13ᵗʰ International Conference on
Research in computIng at Feminine

Women Empowering Innovations in Artificial Intelligence

May 20 -21, 2024
Faculty of Information and Communication Technology
University of Abdelhamid Mehri - Constantine 2

RIF
LA RECHERCHE AU FÉMININ.

# The 13th International Conference on Research in computIng at Feminine

# PROCEEDINGS of RIF 2024

## Women Empowering Innovations in Artificial Intelligence

**May 20 -21, 2024**

**Faculty of Information and Communication Technology
Abdelhamid Mehri University Constantine, Algeria**

**Partners**

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## SESSION 01: Healthcare Innovations and AI Applications

## SESSION 02 : Advanced AI Applications

## SESSION 03 : :AI-Powered Social Innovation

## SESSION 03 : AI and Optimization

## Session 5: SHORT PAPERS

# Preface

The international conference on Research in computIng at Feminine (RIF) in Constantine, Algeria, has been held annually since 2012 and has emerged as a gathering for women researchers, engineers, and practitioners in the field of computer science. This multidisciplinary event aims to foster collaboration and address the challenges of advancement in the field, with a particular emphasis on emerging technologies. The upcoming RIF 2024 edition, themed "Women Empowering Innovations in AI," highlights the conference's focus on women's contributions in artificial intelligence. Grounded in scientific inquiry, the conference explores crucial aspects such as clarifying fundamental concepts, presenting cutting-edge research, implementing practical findings, and conducting experiments within the realm of advanced technology. Researchers and practitioners are encouraged to submit original contributions, enriching the ongoing narrative of women's impact in computing. The call for submissions welcomes both regular and short papers that delineate original work and applications across any of the areas listed below. Researchers are invited to submit comprehensive research reports or work-in-progress reports, offering a diverse range of insights and perspectives. For those unable to attend the conference, RIF 2024 will offer Hybrid (online) participation options.

We encouraged submissions that explore various aspects, including but not limited to:

- Machine Learning and Deep Learning Applications
- Natural Language Processing and Understanding
- Explainable AI
- Business Transformation and analytics
- Data Centric AI
- AI in Healthcare, Finance, Industry 4.0, etc.
- Cyber Security in AI and Machine Learning Systems
- Robotics and Autonomous Systems
- Parallel and Distributed Computing
- AI-driven Innovation and Entrepreneurship
- Human-AI Interaction and Collaboration
- Modern and Emerging Systems

In response to the call for papers, 33 papers were submitted. Each paper was reviewed by at least two reviewers and evaluated based on originality, quality, and relevance to the conference topics. The Program Committee selected 16 papers (12 as regular papers and 4 short papers) for publication in the proceedings and presentation at the Conference.

We would like to express our appreciation to the authors of the submitted papers, the Program Committee members, and the external reviewers. We owe special thanks to the Organizing Committee members for the hard work they did locally in Constantine.

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MAY 2024,
Fouzia MAGRA-BENCHIKHA
Faiza BELALA
Zizette BOUFAIDA
Wafa GHEMMAZ
Naila Marir
Wissem BOUARROUDJ

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- **Zizette BOUFAIDA**, University of Constantine 2, Algeria

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- Zizette Boufaida, Constantine 2 University, Algeria

# Keynote Speakers

### Pr Esma Aïmeur

Esma Aïmeur is a Professor in the Department of Computer Science at the University of Montreal. She is the Director of the Artificial Intelligence and Cybersecurity Laboratory. She obtained her Ph.D. in computer science (Artificial Intelligence) from the University of Paris 6 (France). She works on privacy and security, applying artificial intelligence techniques to manage personal data in e-Learning, Finance, and Medicine. Her most recent research focuses on online deception, fake news, ethics of artificial intelligence, social networks, security awareness, recommender systems, and privacy preservation.

**Pr Nawres KHLIFA**, Engineer and PHD of the National School of Engineers of Tunis ENIT, Tunisia. She is currently Professor at the Higher Institute of Medical Technologies of Tunis- Tunis El Manar University. She coordinates the TIMEd team: Medical Image Processing. Her research work focuses on Artificial Intelligence in medical imaging, emotion recognition and gaze tracking.

**Dr Hadjira BOUDER**, a Doctor of Law and a permanent researcher specializing in Digital Law at the Center for Research on Scientific and Technical Information (Cerist). She is the head of the first research team on Digital Law in Algeria. She has conducted several research works in the field of Digital Law (scientific articles, national and international communications, research reports, etc.), particularly on intellectual property in the digital space, cybercrime, electronic signatures, and e-commerce.