





The University of Informatics Sciences (UCI) invites professionals linked to training, research, development and innovation activities in the field of computer sciences and others related to the development of higher education, to participate in the 5th International Scientific Convention UCIENCIA, to be held from September 27 to 29, 2023, at the Meliá Internacional Varadero Hotel, Cuba, with the aim of providing a space for the exchange of experiences, disseminate research results and promote cooperation among the participating institutions.

# **#ORGANIZING COMMITTEE**

President: Ph. D. Raydel Montesino Perurena

Vice-president: Ph. D. Lidia Ruiz Ortiz

President of the Scientific Committee: Ph. D. Héctor Raúl González Die

**Executive Secretary:** M. Sc. Beatriz Aragón Fernández

# 8th International Congress on Artificial Intelligence and Pattern Recognition IWAIPR 2023.

Coordinator: Ph. D. Yanio Hernández Heredia (yhernandezh@uci.cu)

- \_ Intelligent data analysis.
- \_ Shape and Texture Analysis.
- \_ Spatial-Temporal Analysis.
- Remote Sensing Applications.
- \_ Pattern Recognition Applications.
- \_ Application of Geometric Algebra in Pattern Recognition.
- \_ Deep and Reinforced Learning.
- \_ Special Hardware Architectures.
- \_ DB, Knowledge Bases and Linguistic Tools.
- \_ Big Data.
- \_ Bioinformatics.
- \_ Clustering.
- \_ Image and Video Coding, Processing and Analysis.
- \_ Parallel and Distributed Computing in Pattern Recognition.
- \_ Data and Text Mining.
- \_ Opinion Mining and Sentiment Analysis.
- \_ Mathematical Morphology.
- \_ Principles of Pattern Recognition.
- \_ Natural Language Processing.
- \_ Document Processing and Recognition.
- \_ Signal Processing and Analysis.

- \_ Combinatorial Logical Pattern Recognition.
- \_ Syntactic and Structural Pattern Recognition.
- \_ Speech and Voice Recognition.
- \_ Neural Networks.
- \_ Robotics and Humanoids.
- \_ Artificial Intelligence Techniques in Pattern Recognition.
- \_ Fuzzy and Hybrid Techniques in Pattern Recognition.
- \_ Mathematical Theory of Pattern Recognition.
- \_ Computer Vision.
- \_ Data Visualization and Applications of Pattern Recognition.
- \_ Other AI and Pattern Recognition Application Areas.

# International Symposium on Digital Transformation.

Coordinator: Ph.D. Yeleny Zulueta Veliz (yeleny@uci.cu)

### 10th International Workshop on Free and Open Source Software and Emerging Technologies.

- Adoption of free software and open source technologies.
- Building / customizing Operating Systems based on open sources.
- \_ Economic, legal and social aspects of free software.
- Free software technologies.
- \_ Android and free operating systems for cell phones.
- \_ Emerging technologies associated with free software and/or open hardware (Blockchain, Cloud Computing, Open Source Robotics-Domotics, Internet of Things, Disruptive Technologies).
- Work experiences of Free Software Communities.

### 10th International Project Management Workshop

- \_ Project Engineering, experiences, cases and applications.
- Computational Intelligence and emerging computing techniques applied to Project Management.
- \_ Agile methodologies applied to projects.
- Project-Oriented Organizations, Strategic Planning, Project, Program and Portfolio Management.
- \_ Project Management Information Systems and Digital Transformation.
- Digital Ethics, Social and Environmental Responsibility.
- \_ Human resources and leadership, project management training.

# 5th International Workshop on Software Engineering and Quality

- \_ Software Engineering for Contemporary Products and Services.
- \_ Software Testing.
- \_ Software Testing Infrastructures.
- \_ Software Engineering Best Practices.
- Evaluation and improvement of information and communication technology processes and services.
- \_ Software Security, Privacy and Protection.

#### **3rd International Cybersecurity Workshop**

- Cybersecurity Management.
- Secure software development, web and mobile applications.
- \_ Artificial Intelligence and Data Science applied to cybersecurity.
- \_ Cryptography.
- Security Audits and Ethical Hacking.
- \_ Incident management and computer forensics.
- \_ Internet Privacy and Security.
- Cybersecurity in emerging technologies: IoT, smart cities, cloud computing, cyber-physical systems.
- \_ Software-defined infrastructures.
- \_ Malware detection and analysis techniques.
- \_ Dealing with cybercrime and threats, ethical and legal aspects of cybersecurity.
- \_ Security in industrial environments and critical infrastructures.
- Development and promotion of a cybersecurity culture.

# 1st International Workshop on Human-Computer Interface Technologies

- \_ Virtual Reality, Augmented Reality and Mixed Reality.
- Emotional Interfaces.
- \_ Voice Interfaces.
- \_ Eye-tracking interfaces.
- \_ Brain-Computer Interfaces.
- \_ Gamification.
- \_ Collaborative learning.
- \_ IoT and Robotics.
- \_ Adaptive instructional systems.
- \_ Adaptability in interactive systems.
- \_ Videogames.
- \_ Artificial Intelligence in HCI.
- \_ User experiences.
- \_ Usability.
- \_ Accessibility.

International Symposium on Computational Mathematics and Bioinformatics.

Coordinator: Ph.D. Jorge Gulín González (gulinj@uci.cu)

#### 5th International Workshop on Computational Mathematics

- Computational Mathematics.
- \_ High Performance Computing.
- Scientific Computing.
- Computational Physics and Chemistry from classical and ab-initio methods.
- \_ Computational Design of Nanomaterials.
- \_ Computational Microfluidics.
- \_ Computational Scientometry and Scientometric Indicators.
- \_ Neurorinformatics.
- \_ Computational Cryptology.

### 1st International Workshop on Computational Biology and Bioinformatics

- \_ Molecular Modeling and Simulation.
- \_ Molecular Evolution and Phylogeny.
- \_ Omics.
- \_ Systems Biology.
- \_ Biological Sequence Analysis.
- \_ Computational Learning Algorithms in Bioinformatics.
- \_ Chemoinformatics, QSAR and QSPR.
- \_ Databases in Bioinformatics and Chemoinformatics.

1st International Workshop on Computational Biology and Bioinformatics

- \_ Computational Drug Design.
- \_ Rational Vaccine Design.
- \_ Molecular Epidemiology.
- \_ Bioinformatics in Health and Precision Medicine.
- \_ Bioinformatics in Agriculture and Livestock Research.
- \_ Bioinformatics Competency Training.

# International Symposium on Professional Training.

Coordinator: Ph.D Ailec Granda Dihigo (agranda@uci.cu)

# 10th International Workshop Language and Technology L@ngtech

- Curricular design and contextualization of referents in the process of language teaching, learning and evaluation.
- \_ The communicative competence in English for the internationalization of curricula.
- \_ The use of ICT in the process of language teaching, learning and assessment.
- \_ Language teaching in post-COVID times.

## 5th International Workshop on Training in Computer Science

- \_ Training of the informatics and computer science professional.
- \_ Current trends in the didactics of computer and related sciences.
- \_ Curricular design in university careers with a computer science profile.
- \_ Education and transformative learning for sustainable development.
- \_ Quality in the teaching-learning process of computer sciences and related subjects.
- The academic-labor and research activity in the curriculum of professionals in computer and related sciences.
- \_ The process of continuing education of computer science and computing professionals.

# 1st International Workshop on Virtual Education and Educational Technology

- \_ Educational models and learning scenarios based on ICTs.
- \_ Curricular design for virtual education programs.
- Design, development and evaluation of virtual courses and digital educational resources.
- \_ Tutoring in virtual education.
- \_ Teacher training in the use of ICTs.
- \_ Digital learning ecosystems, learning management systems and other educational tools.
- \_ Learning analytics in virtual education.
- \_ Quality management in virtual education.

# International Symposium University and Society.

Coordinator: Ph.D. Pedro L. Basulto Ramírez (basulto@uci.cu)

### 5th International Workshop on Science and Innovation Management.

- Role of the University in science, technology and innovation systems.
- Experiences in the policies and management of science, technology and innovation in universities and their social impact.
- \_ Studies on science, technology and society interaction: environmental impacts, gender and science, public participation, perception of science and scientific culture.
- \_ Renewal of the methodological theoretical frameworks of STS linked to ICTs.
- \_ University- Enterprise -Society Link. Its impact on socio-economic development.
- Innovation management for local development.
- \_ R+D+i programs and projects as a way to strengthen the University Enterprise linkage.
- \_ Role and experiences of the new forms of dynamizing science, technology and innovation: Science and Technology Parks; Science and Technology Interface Societies and Non-Profit Foundations, in the promotion of University - Enterprise relations.
- Enterprise experiences in the management of science, technology and innovation.
- \_ Information and communication technologies in science- and innovation-based government management
- \_ Experiences of scientific advice to governments, organizations, companies or institutions.
- \_ Regional strategies and international cooperation alliances for strengthening the university-enterprise link and the management of science, technology and innovation.

### 4th International Workshop on University Extension

- \_ The management of university extension as a dynamic and transforming process of the bidirectional relationship University Society and its integration with the substantive university processes.
- \_ University extension in the management of strategic alliances that generate development and progress among universities, governments, companies and institutions.
- Extension commitment to safeguarding heritage and defending the identity and cultural diversity
  of communities.
- \_ Methodological experiences in the improvement of university extension projects and their transforming role in the community.
- \_ University welfare, sports, gender, senior aging and social inclusion.

### 1st Workshop on Internationalization of Higher Education

- \_ The Internationalization of Higher Education in the current context and future prospects.
- \_ Higher education in regional integration in Latin America and the Caribbean.
- \_ Internationalization of the curriculum, research and innovation, and teacher training.
- \_ International cooperation and its impact on sustainable local development.
- \_ The role of ICTs in the internationalization of higher education.
- \_ Academic and student mobility and virtual exchange programs.
- \_ The role of international and regional organizations in the development of international cooperation projects.

#### 1st International Workshop on Higher Education for the Sustainable Development Goals

- \_ Government and sustainable university campus.
- \_ Energy, water, recycling, transport, waste management and circular economy in universities.
- \_ Strategic Direction for the SDGs in universities.
- \_ Risk Management for sustainability in universities.
- \_ University Social Responsibility.
- \_ Evaluation and reports of sustainability in universities.
- \_ Teaching to introduce the SDGs in higher education.
- \_ The university curricular design based on the SDGs.
- \_ Competences for sustainability in students and educators.
- \_ Interdisciplinarity and transdisciplinarity for sustainability in higher education.
- \_ Innovations and solutions for the SDGs in higher education.
- \_ Contribution of the university to climate action.
- \_ The contribution of the university to the National Plan for Economic and Social Development until 2030 of Cuba (PNDES 2030).

### 2nd Contest "My thesis in three minutes".

Coordinator: Ph.D. Yamilis Fernandez Perez (yamilisf@uci.cu)

3MT (Thesis in Three Minutes) contest in which doctoral students are challenged to consolidate their ideas, results and prepare a clear speech that transmits in a few words and in a short time the importance of the research topic. The academic and communicative skills of the participants are tested before an academic jury and a non-specialized audience.



Papers will be received through the EasyChair platform <a href="https://easychair.org/cfp/UCIENCIA2023">https://easychair.org/cfp/UCIENCIA2023</a>, except for those corresponding to the IWAIPR 2023 Congress, which should be sent to the Springer conference management platform <a href="https://equinocs.springernature.com/service/IWAIPR2023">https://equinocs.springernature.com/service/IWAIPR2023</a>

The review of the papers will be performed by double-blind peers and their acceptance will be subject to the evaluation of the Scientific Committee corresponding to each thematic event.

Accepted papers will be published in the official reports of the Convention, under the imprint Ediciones Futuro with the corresponding ISBN registration. A selection of the papers will be proposed for publication in journals related to the topics of each event. Some papers on specific topics will be published in selected Springer books.

For more information and to access the paper template, please visit https://uciencia.uci.cu

LANGUAGES\_ Spanish and English

May 15, 2023 Deadline for the reception of papers.

June 20, 2023 Acceptance by the Scientific Committee.

July 10, 2023 Deadline for the reception of corrected papers.

**Includes:** certificate of participation, accreditation module and official reports of the Convention.

|                            | From May 20 to September 15, 2023     |  |
|----------------------------|---------------------------------------|--|
| INTERNATIONAL PARTICIPANTS |                                       |  |
| Professional               | 350 EUR                               |  |
| Undergraduate Student (*)  | 250 EUR                               |  |
| NATIONAL PARTICIPANTS      |                                       |  |
| Professional               | 4500 CUP                              |  |
| Undergraduate Student (*)  | 3000 CUP                              |  |
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<sup>(\*)</sup> Before paying the registration fee, undergraduate students must have their paper accepted and prove their status by attaching a letter from the Dean of the Faculty where they are studying, with signature and seal.



## // PAYMENT OF THE REGISTRATION FEE AND ASSOCIATED SERVICES

#### FOR FOREIGN DELEGATES

- Payment should be made to GIRA S.A. Travel Agency through the following link:
  <a href="https://www.multiverzo.com/es\_ES/event/v-convencion-cientifica-internacional-uciencia-2023-2023-10-03-2023-10-05-42/introduction">https://www.multiverzo.com/es\_ES/event/v-convencion-cientifica-internacional-uciencia-2023-2023-10-03-2023-10-05-42/introduction</a>
- For further information please contact: ventas9@gira.co.cu, grupogiraadm@gmail.com

#### FOR NATIONAL DELEGATES

- Payment will be made to HAVANATUR S.A. Travel Agency by Bank Transfer to account number: 0300000005803717 Holder: S. HAVANATUR T. AND T. LA HABANA.
- \_ You may request further information to the following e-mails: jd.eventos@havanatur.cu; esp2.eventos@havanatur.cu

#### // CONTACT

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