

## XVI Congress of Latin American Women in Computing 2024

Proceedings of the XVI Congress of Latin American Women in Computing 2024 (LAWCC 2024)

co-located with Latin American Computing Conference (CLEI 2024)

Bahía Blanca, Argentina, August 14, 2024.

Edited by

**Silvana Roncagliolo de la Horra** <sup>1</sup>

**Laura A. Cecchi** <sup>2</sup>

**Rocío Cecchini** <sup>3</sup>

**Verónica Gil-Costa** <sup>4</sup>

<sup>1</sup> Pontificia Universidad Católica de Valparaíso , Escuela de Ingeniería Informática, Valparaíso, Chile

<sup>2</sup> Universidad Nacional del Comahue , Facultad de Informática, Neuquén, Argentina

<sup>3</sup> Universidad Nacional del Sur, Departamento de Ciencias e Ingeniería de la Computación , Bahía Blanca, Argentina

<sup>4</sup> Universidad Nacional de San Luis, FCFMyN , San Luis, Argentina

# PREFACE

The XVI Latin American Women in Computing Congress (XVI LAWCC) was organized within the L Latin American Computing Conference (CLEI 2024). LAWCC2024 was held on August 14th, at Bahía Blanca, Argentina. Its main objective is to highlight women's research, interests, and achievements in various computing areas to encourage more women's participation in technology. Tomorrow's jobs are professional careers in Science, Technology, Engineering, and Mathematics (STEM), and those are careers where women have been historically underrepresented. In STEM jobs with higher incomes, the lowest percentages are women workers. Therefore, this space seeks to foster sustainable development, drive innovation, social welfare, and inclusive growth with more women in STEM. The LAWCC's research work identified the challenges of women in STEM, Information and Telecommunications Technology (ICT), teaching, the workplace, and research. Simultaneously, those works addressed recurrent issues related to gender and interaction with society.

## Topics of Interest

- ✓ Analysis of the activity and participation of women in STEM (Sciences, Technology, Engineering and Mathematics) and ICT (Information and Communication Technologies) in general.
- ✓ Contributions of women from STEM / ICT areas in responding to the pandemic.
- ✓ Female participation in scientific and technological events (hackathons, science clubs, etc.).
- ✓ Inclusive software development (games, apps and others) with a strong participation of women.
- ✓ Initiatives to promote gender equity in STEM / ICT.
- ✓ Experiences of women's groups / communities in STEM / ICT areas.
- ✓ Gender and Human-Computer Interaction.
- ✓ Female leadership models and ICT.
- ✓ Gender specificities in the development and implementation of ICT.
- ✓ Gender specificities in the teaching of STEM / ICT, at the 5 levels: initial, preschool, basic / primary, middle and higher education.
- ✓ Participation of women in decision-making at the national and international level in relation to the use of ICT.
- ✓ Public policies around Women and ICT.
- ✓ Initiatives to awaken vocations in STEM/ICT in adolescent girls and women and increase female participation in this type of careers.

The current edition, LAWCC 2024 had 17 submissions, from which 10 full papers were accepted. These papers have involved 33 authors from Argentina, Brazil, Canada, Chile, Costa Rica, Ecuador, El Salvador, Panama, Paraguay, Peru and Spain.

## Program Chairs

- ✓ Verónica Gil-Costa (Universidad Nacional de San Luis, FCFMyN , Argentina)
- ✓ Rocío Cecchini (Universidad Nacional del Sur, Argentina)
- ✓ Laura A. Cecchi (Universidad Nacional del Comahue, Argentina)
- ✓ Silvana Roncagliolo de la Horra (Pontificia Universidad Católica de Valparaíso, Chile)

## Program Committee

- Alexandra González Eras – Universidad Técnica Particular de Loja
- Alicia García-Holgado – Universidad de Salamanca
- Ana Maguitman – Universidad Nacional del Sur
- Ana Aguilera – Universidad de Valparaíso
- Andrea Delgado – Universidad de la República
- Ariella Quesada – Universidad Nacional
- Carina González – University of La Laguna
- Carlos Juiz – University of Balearic Islands
- Carlos Brizuela Rodriguez – CICESE
- Christian von Lücken – Universidad Nacional de Asunción
- Cristina Manresa-Yee – Universitat de les Illes Balears
- Daniel Romero – UCOM
- Diego P. Pinto Roa – Universidad Nacional de Asunción
- Dolores Rexachs – Universitat Autònoma de Barcelona
- Donna Roper – Universidad de Panamá
- Eliana de Almeida – Universidade Federal de Alagoas
- Elisa Heymann – Universidad Autonoma de Barcelona
- Emilio Luque – Universitat Autónoma de Barcelona
- Gabriela Marín-Raventós – Universidad de Costa Rica
- Genoveva Vargas-Solar – Univ. Grenoble Alpes
- Germania Rodriguez Morales – Universidad Técnica Particular de Loja
- Helena Gómez Adorno – IIMAS-UNAM
- Irene Loiseau – UBA
- Jose Colbes – Universidad Nacional de Asuncion
- José Luis Vázquez Noguera – Universidad Nacional de Asunción
- Josilene Moreira – Universidade Federal da Paraiba
- Katty Rohoden – UTPL
- Kelly Braghetto – University of São Paulo
- Luciana Frigo – Universidade Federal de Santa Catarina
- Marcela Varas – Universidad de Concepción
- Maria Tardivo – Universidad Nacional de Río Cuarto
- Maria Paula Gonzalez – Universidad Siglo 21 – Universidad Nacional del Sur
- Maria Garcia Diaz – Universidad Nacional de Asunción
- Maria Urquhart – Universidad de la República

- Mario Piattini – University of Castilla-La Mancha
- Maristela Holanda – Universidade Brasília
- Nilda Yanguez – Universidad Tecnologica de panama
- Nora Reyes – Universidad Nacional de San Luis
- Olga Marino – Universidad de los Andes
- Paula Verghelet – UBA
- Rafael García Gómez – Politécnico Grancolombiano
- Regina Motz – Universidad de la República
- Rosa Arriaga – Georgia Tech
- Samanta Cueva – Universidad Técnica Particular de Loja
- Shalini Ramchandani Moorjimal – USACH

We would like to express our sincere gratitude to CEUR-WS.org for their support in publishing these proceedings. Their commitment to providing a free, open-access platform for workshop and conference proceedings in the computer science domain has significantly contributed to the dissemination of our research.

December 2024