EDICIÓN 40
CLEI 2014
15 al 19 de setiembre
Montevideo, Uruguay

XL Conferencia Latinoamericana en Informática

SECOND CALL FOR PAPERS

Program Committee Chairs:

Héctor Cancela, Uruguay
José Aguilar, Venezuela

Symposia:
Computer Graphics, Virtual Reality and Image Processing

Álvaro Pardo, Uruguay,
Manuel Menezes de Oliveira Neto, Brasil

Software Engineering

Martín Solari, Uruguay
Sergio España, España

Computing and Society

Inés Friss de Kereki, Uruguay
Francisco Mata, Costa Rica

Operations Research and Artificial Intelligence

Ernesto Ocampo, Uruguay
Paula Zabala, Argentina

Infrastructure, Hardware and Software

Javier Baliosian, Uruguay
David Padua, USA

Enterprise Computing

Raúl Ruggia, Uruguay
Hernán Astudillo, Chile

Innovative Data Systems

Adriana Marotta, Uruguay
Elzbieta Malinowski, Costa Rica

Theory of Computation

Alberto Pardo, Uruguay
Nazareno Aguirre, Argentina

Organizing Committee Chair:

Andrea Delgado, UdelaR

Members:

Daniel Canoniero, UM	Pablo Ezzatti, UdelaR
Laura González, UdelaR	Daniel Jenci, UDE,
Carlos Luna, UdelaR	Gerardo Matturro, ORT
Ernesto Ocampo, UCUDAL	Franco Robledo, UdelaR
Ariel Sabiguero, UdelaR	

Important Dates

Paper submission deadline: April 7, 2014
Notification of acceptance: June 23, 2014
Final version submission: July 21, 2014

Venue

XL CLEI will be held at Universidad de la República, Montevideo, Uruguay. Montevideo is the capital of Uruguay, it is located on the Rio de la Plata and has a million and a half inhabitants. CLEI is jointly organized by Universidades de la República, Católica, ORT Uruguay, de Montevideo and de la Empresa. Montevideo has a very good flight connection with America and Europe, with direct flights from several cities, and river and road connection with several countries.

Purpose

CLEI XL is the main Latin American forum for exchanging ideas, experiences and research results between scientists, professionals and students in informatics and computer science and engineering, as well as its technological applications.

Conference Topics

CLEI XL calls for papers reporting results of a theoretical nature and/or practice that advance the state of the art or present relevant applications or cases in the areas of interest of the symposia or associated events. The conference is composed of eight (8) simposia and includes several activities such as presentations, tutorials, keynotes and discussion forums.

Information for Paper submission

Papers can be written in Spanish, Portuguese or English, and should be sent in PDF format prior to April 7, 2014 throught the CLEI 2014 website (http://clei.org/clei2014) using the EasyChair platform.

• Submitted papers must present original research results or relevant experience reports, and should not be published or under evaluation for other conferences and/or journals. An article can be sent to only one symposium or associated event. Submitting the same article to several symposia or associated events will be basis for rejection.

• Submissions should not exceed 12 pages, including figures, references and an abstract of 150 words in the official language accepted by CLEI 2014 (Spanish, Portuguese and English). If the submissions are written in Spanish or Portuguese, they should have an abstract in English. Submitted papers must be formatted according to IEEE standard referenced in the CLEI 2014 website.

• Submitted papers must be substantial intellectual contributions of the authors and follow practices to avoid plagiarism as set out in the Operations Manual for Services and Products Publication of IEEE (http://www.ieee.org/opsmanual.pdf)

• The final program and the proceedings will only include papers with at least one author registered in the AUTHOR category of the conference before final version submission deadline.

• A selection of the best papers accepted and presented at the symposia of CLEI 2014 will be proposed for publication in selected journals such as CLEI Electronic Journal (http://www.clei.cl/nuevaweb/index.php?module=revista) and Electronic Notes in Theoretical Computer Science (http://www.entcs.org/). Invited authors must submit an improved and expanded version of the article in English that will undergo a new evaluation process.

• Only papers accepted and presented at the symposia of CLEI 2014 will be indexed and published by IEEE Xplorer digital library (pending).

Information for Tutorials proposals

Submissions for tutorials are welcome (half a day or full day) which present research results, the state of the art of a particular topic, or to introduce a topic of industrial or academic interest. The tutorial proposal should be sent through the EasyChair platform or by e-mail to {cancela,adelgado} at fing.edu.uy.

CLEI SYMPOSIA TOPICS

Latin American Symposium on Computer Graphics, Virtual Reality and Image Processing
- Animation and Simulation
- Coding, Compression and Transmission of Images/Videos
- Computer Vision
- Games
- Geometric and Solid Modeling
- Computer Graphics Hardware
- Realism and Image Synthesis
- Information Visualization
- Motion Capture/Editing/Synthesis
- Images and Videos Processing
- Search and Retrieval of Images and Videos
- Segmentation and Grouping of Images and Videos
- 3D Interfaces
- Virtual, Augmented and Mixed Reality

Latin American Symposium on Computing and Society
- ICT Access and Use
- Legal, Ethical and Social issues related to Computing
- Applications of Computing to other fields: e-Science, e-Health, e-Justice, e-Tourism, e-Education, etc. Papers submitted on e-Education should be related to general applications to education (collaborative learning, virtual learning, etc), and not to computer science courses (these should be submitted to CIESC)
- e-Government and e-Democracy
- Knowledge Economy, e-Business (e-Commerce, Social Commerce, e-Logistics, etc.)
- Applications related to New Enabling Technologies (Internet, Web 2.0, Mobile Applications, etc.)
- Free Software (usage policies, business models, etc.)
- Computing impact and Transformations on Society

Latin American Symposium on Infrastructure, Hardware y Software
- Networks and Data Communication
- Computer Architecture, Embedded Systems
- Microelectronics, Integrated Circuits, Processors, etc.
- High Performance Computing, Mobile Computing
- Operating Systems
- Performance evaluation
- Computer and Network Security
- Signal Processing
- Networking wireless PAN, LAN, MAN y WAN
- Mobile Networks (3G, 4G, LTE, WiMax), Optical Communication
- Sensor Networks, Converged Networks and Next Generation Networks
- Network Management, Optimization and Quality of Service
- Multimedia: VoIP, IPTV, DVB, VoD, CDN, etc.
- Grid Computing, Cloud Computing
- Robotics

Latin American Symposium on Software Engineering
- Safety, Security, Privacy, and Risk Management
- Metrics and Measurement
- Architecture, Frameworks, and Design Patterns
- Requirements Engineering
- Process, Standards, and Project Management
- Maintenance and Reverse Engineering
- Quality Assurance and Management
- Verification, Validation, Testing, and Analysis
- Component-Based Development and Reuse
- Empirical Studies, Benchmarking, and Industrial Best Practices
- Applications and Tools
- Collaborative, Distributed, Embedded, Real-Time, High Performance, Highly Dependable, Intelligent, Multimedia Systems
- Human-Computer Interaction
- Model-driven development
- Agile Software Development y Global Software Development

Latin American Symposium on Operations Research and Artificial Intelligence
- Linear and Nonlinear Programming
- Optimization
- Game Theory, Queue Theory
- Stochastic Processes
- Intelligent Agents
- Artificial Neural Networks, Fuzzy Logic, Evolutionary Computation
- Artificial Life
- Natural Language Processing
- Expert Systems and Knowledge-Based Systems
- Knowledge Representation
- Artificial Vision, Pattern Recognition
- Machine Learning, Automated Reasoning
- Intelligent Environments
- Bio-inspired Computing

Latin American Symposium on Enterprise Computing
- Service-Oriented Architectures (SOA) and Enterprise Service Architectures (ESA)
- Middleware for Enterprise Computing (Web Services, Enterprise Service Bus, Message-oriented)
- Complex event processing and event-driven architectures
- Enterprise Architecture and Enterprise Application Architecture
- Enterprise Applications Deployment and Governance
- Model-driven architectures and development for business processes and services
- Methods for Enterprise Engineering
- Process-oriented software architectures and Service-oriented architectures for BPM
- Process-aware information systems (PAIS), Human-centric PAIS, Social BPM
- Business process modeling, verification, configuration and implementation
- Business process execution, process mining, business process intelligence
- Distributed and cross-organizational business processes
- Cross-enterprise Internet-based collaboration in a world of cloud, social and big data
- Enterprise integration, business integration and systems integration
- Enterprise Applications and Platforms.

Latin American Symposium on Innovative Data Systems
- Data and Text Mining
- Semantic Web, Cloud Data Services, "Web of Data"
- Knowledge Databases, Non-Relational Databases
- Interaction of Structured, Semi-Structured and Unstructured Data
- Different Extensions to Databases (Spatial, Temporal, Spatio-Temporal, Mobile, Real-Time, etc.)
- Data Visualization, Data Warehouses and OLAP
- Management of Uncertain Information (Probabilist Databases, Ranking, Preferences, etc.)
- Data Privacy and Security
- Personalization and Contextualization of Query and Search Tasks, Query Processing and Optimization
- Parallelism in Data Management
- Models, Storage and Management of Large Data Sets

Latin American Symposium on Theory of Computation
- Algorithms
- Computability and Complexity
- Automata Theory and Formal Languages
- Principles and Semantic of Programming Languages
- Theory and Models of Concurrency, Security and Mobility
- Logic and its application to Computing
- Formal Models on Requirements, Components and Software Architectures
- Formal Techniques and Foundations for Software Analysis
- Type Theory and Category Theory in Computing