

Call for Contributions

Inform the Chair: with the Title of your Contribution Submission

URL: <https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=PATTERNS+2017+Special>

Please select Track Preference as **PATTOLOGY**

Special track

PATTOLOGY: Patterns in Combinatorial Structures and Algorithmic

Chair and Coordinator: Dr. Jacqueline Daykin, Aberystwyth University (Mauritius Branch Camp), Mauritius
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Along with

PATTERNS 2017, The Ninth International Conferences on Pervasive Patterns and Applications
February 19 - 23, 2017 - Athens, Greece

<http://www.iaria.org/conferences2017/PATTERNS17.html>

We introduce the term *pattology* as the description and analysis of combinatorial patterns discovered during the scientific process. Nature is abundant with inherently patterned forms and likewise computer scientists discover similar beauty in the mathematical world for both finite and infinite structures.

Stringology, the study of strings, namely sequences of symbols over an alphabet, has uncovered many features such as: borders, repetitions, palindromes, periodicities, necklaces. Applications of stringology arise for instance in analyzing repeating regions in protein and DNA sequences, compression in big data, and in capturing musical rhythms. Graphs can be classified into many types including: directed, undirected, Hamiltonian, Eulerian, star, connected. Wide ranging applications of graphs cover Internet and transportation issues, and temporal reasoning. Data structures can exhibit tree or linear forms; algorithms can even recurse on themselves. Combinatorial structures seem to continually yield new patterns under research scrutiny.

This special track invites research papers involving novel concepts and results founded on combinatorial patterns and their application in computer science based initiatives. Critical literature reviews and surveys which include future research directions will also be considered.

Topics of PATTOLOGY encompass, but are not limited to patterns arising in:

- Stringology
- Lyndon & Sturmian words
- Bioinformatics
- Temporal structures
- Algorithmics
- Data structures
- Musicology
- Graphs & networks
- Numbers
- Internet issues
- Big data

Important Datelines

- Inform the Chair: As soon as authors decided to submit and secured the financial support
- Submission: January 15
- Notification with comments for camera-ready: January 25
- Registration: February 5
- Camera-ready: February 8

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaia.org]
- Presentations: slide only [slide-deck posted on www.iaia.org]
- Demos: two pages [posted on www.iaia.org]

Paper Format

- See: <http://www.iaia.org/format.html>
- Before submission, please check and comply with the editorial rules:
<http://www.iaia.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iaiajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

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Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaia.org/registration.html>

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