

POLITECNICO DI TORINO Repository ISTITUZIONALE

New and Emerging Topics in Computing

Original New and Emerging Topics in Computing / Montuschi, Paolo. - In: COMPUTER. - ISSN 0018-9162. - ELETTRONICO. -52:10(2019), pp. 7-8.

Availability: This version is available at: 11583/2746056 since: 2019-10-17T08:47:55Z

Publisher: IEEE COMPUTER SOCIETY

Published DOI:10.1109/MC.2019.2929566

Terms of use: openAccess

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright ieee

copyright 20xx IEEE. Personal use of this material is permitted. Permission from IEEE must be obtained for all other uses, in any current or future media, including reprinting/republishing this material for advertising or promotional purposes, creating.

(Article begins on next page)

Spotlight on Transactions – October 2019 issue of Computer

New and Emerging Topics in Computing

Paolo Montuschi, Polytechnic University of Turin

This installment of Computer's series highlighting the work published in IEEE Computer Society journals comes from IEEE Transactions on Emerging Topics in Computing.

The Transactions on Emerging Topics in Computing (TETC) is a publication covering all emerging aspects of computing in the fields of interest of the IEEE Computer Society. TETC is intended to occasionally host top research papers in selected areas (also known as technical tracks) provided that their contents are of emerging nature and are in the scope of the topics currently covered by the "technical tracks", as reported in the journal's website at https://www.computer.org/digital-library/journals/ec/technical-tracks

Although the TETC is a relatively young journal in the portfolio of the Computer Society, its impact factor has grown over the years and the recent publication of the 2018 values, reports 4.989 for TETC, which is a clear, and not the only one, sign of high visibility and impact of the published articles. The impact factor without journal's self citations has the same value, thus denoting that the mission of TETC has been successfully accomplished, i.e. to stay on the top of emerging topics advances and be the reference to all researchers working in computing-related-areas. This is further confirmed by the 5-years impact factor, where TETC reports a value of 5.245, which is one of the highest among the Computer Society publications.

All of this has been made it possible thanks to our Authors and Readers, with strong technical support by our Editorial Board and the Volunteers who served as Guest Editors of our very successful Special Sections. Currently, 75% of the Associate Editors of the journal are either IEEE Fellows or Senior Members.

As of this writing, (mid July 2019), we have just closed 3 special sections (from more recent to oldest):

- Special Section on New Frontiers in Computing for Next-Generation Healthcare Systems
- Special Section on Emerging Trends and Computing Paradigms for Testing, Reliability and Security in Future VLSI Systems
- Special Section on e-Government Research, Management and Innovation

Other special sections have been started or are in the latest steps of the approval and launch process, such as

- Special Section on Assistive Computing Technologies for Human Well-Being
- Special Section on Scalable Computing for Blockchain Systems

In addition, there is on-going work to finalize the launch of a joint special section with the IEEE Transactions on Secure and Dependable Computing.

The journal is soliciting and always open to receive proposals of special sections in the areas of interest related to emerging computing. The instructions and requirements for proposing a special section are found in the webpages of the journal, i.e. at

https://www.computer.org/digital-library/journals/ec/tetc-special-issue-section-proposalinformation-rules/

Also through its technical tracks, TETC is in the forefront of computing innovation and interdisciplinary research. As a matter of reference, a very good example is provided by the very recent paper [1], which combines applied mobile (edge) computing, computational networks and high performance computing in the framework of next generation computing systems. Among the most current hot topics, relevant roles are being played by educational computing [2], emerging systems for secure computing [3], and next generation computing systems [4].

The (continuous) challenge is open, as every day new technology advances open to new areas and opportunities. TETC is and will be there, because the IEEE Transactions on Emerging Topics in Computing is committed to being your transaction destination to stay up-to-date in new fields, innovative research areas and emerging topics in computing, both if you are a Reader and/or a Contributing Author.

PAOLO MONTUSCHI is a professor of computer engineering at Polytechnic University of Turin, serving as 2019 Interim Editor-in-Chief of the IEEE Transactions on Emerging Topics in Computing. Contact him at eic.tetc@polito.it or visit http://staff.polito.it/paolo.montuschi

References

[1] J. Wang, L. Zhao, J. Liu and N. Kato, "Smart Resource Allocation for Mobile Edge Computing: A Deep Reinforcement Learning Approach," in *IEEE Transactions on Emerging Topics in Computing*. doi: 10.1109/TETC.2019.2902661 (early access).

[2] G. S. Mahalakshmi, R. Siva and S. Sendhilkumar, "On The Expressive Power of Scientific Manuscripts," in *IEEE Transactions on Emerging Topics in Computing*. doi: 10.1109/TETC.2018.2870179 (early access).

[3] X. Liu, R. Deng, K. R. Choo and Y. Yang, "Privacy-Preserving Reinforcement Learning Design for Patient-Centric Dynamic Treatment Regimes," in *IEEE Transactions on Emerging Topics in Computing*. doi: 10.1109/TETC.2019.2896325 (early access).

[4] H. Thapliyal, E. Munoz-Coreas, T. S. S. Varun and T. Humble, "Quantum Circuit Designs of Integer Division Optimizing T-count and T-depth," in IEEE Transactions on Emerging Topics in Computing. doi: 10.1109/TETC.2019.2910870 (early access).