*[Apologies if you got multiple copies of this invitation]*

**IEEE ESAS'23: e-Health Systems and Web Technologies, 18th International Workshop**

**ESAS 2023 Web Page:**  https://ieeecompsac.computer.org/2023/esas-2023/

**(In conjunction with IEEE COMPSAC 2023: Computer Society Signature Conference on Computers, Software and Applications, June 26 - 30, 2023)**

**(COMPSAC 2023 Theme: “Resilient Computing and Computing for Resilience in a Sustainable Cyber-Physical World”)**

**Call for Papers:**

**Workshop papers due: 7 April 2023**

**Workshop paper notifications: 1 May 2023**

**Camera-ready and registration due: 7 May 2023**

Authors are invited to submit original technical papers and novel research contributions in any aspect of the following topics and covering but not limited to the topics of interest listed below**:**

**Track 1: Smart health and applications (e-Health)**

Health management and analytics; Big data in health; Healthcare IoT applications; IoT Medical Devices; Electronic health records; Knowledge management, data and text mining in health; Algorithms and methods for gathering clinically-relevant knowledge from IoT devices; Health applications using social media technologies and services; Clinical decision support systems and tools; Expert Systems for Healthcare; Evidence-based practice; E-health oriented software architectures; E-health applications; Semantic web and E-health systems; Smart health systems and applications; Biomedical semantics; Health informatics and its applications; Modeling of health service usage; Innovations and future developments in healthcare technologies; Security, privacy and protection of personal data in health systems; IoT and IoE for healthcare; Cloud sensors for healthcare systems; Wireless Body Area Sensor Networks; Secure data transmission in healthcare and medical sciences; Medical data storage and processing in Cloud; Training and learning algorithms in healthcare systems; Reliability and Fault-Tolerant in healthcare systems; Wearable and implantable medical devices; Telecare and telehealth; Home monitoring systems; E-Health & M-Health with advanced computing techniques; IoT-based Active and Healthy Ageing technologies; Blockchain technology in healthcare; Cancer detection, treatment and care using IoT, Fog & Cloud Computing approaches; IoT medical devices’ energy efficient design and development; Energy efficient communication for smart monitoring in IoT medical.

**Track 2: Artificial Intelligence with Web Technologies and Data (AIWD)**

Data science and Machine learning models; Applications of machine learning; Machine learning for schema matching, instance matching, search, and retrieval; Machine learning models on knowledge bases and semantic networks; Linked data management and analytics; Big data analytics and applications; Automated and traditional information retrieval and applications; Data mining and applications; Deep Learning and applications; Data-driven services and applications.

**Track 3: Recommendation Systems (RS)**

Recommendation systems and algorithms; Information filtering; Machine learning for recommendation; Multi-agent recommender systems; Recommendation and social networks; Context-aware recommenders; Recommender system user interfaces.

**Track 4: Web Technologies, Services, and Applications (WTSA)**

Web technologies, frameworks, languages, appliances, and services; Semantic Web, ontology, and Web services; Web services challenges on trust, security, performance, scalability; Web & IoT, data management and analytics; Cyber-physical systems; Distributed systems, edge computing, and streaming data analysis; Smart city applications; Platforms, technologies, mechanisms, and case studies.

**Journal and Book Publications**

A sequel is being proposed to the successful ESAS Workshops Series (2006 – 2022) of the COMPSAC conferences.

**Past ESAS journal special issues and book publications include the following:**

* ***A special issue*** of the best papers of **ESAS 2006** was published with ***An International Journal, IOS Press,*** ISSN 1574-1702; Volume 4, Number 3, 2008, pp: 293-346.
* The authors of the papers accepted at **ESAS 2007** and **ESAS 2008** were invited to submit extended versions of their papers for publication in ***the special issue on Engineering Semantic Agent Systems*** of Expert Systems: The Journal of Knowledge Engineering by Wiley-Blackwell Publishing. Vol 28, No. 5, 2011, pp: 410-487.
* The authors of **ESAS 2009/10** were invited to submit an extended and revised version of their papers for ***publication in an edited volume titled Semantic Agent Systems: Foundations and Applications*** by Springer-Verlag. The book has been published ([http://www.springer.com/engineering/mathematical/book/978-3-642-18307-2](https://eur04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.springer.com%2Fengineering%2Fmathematical%2Fbook%2F978-3-642-18307-2&data=04%7C01%7Ckaw%40science.uva.nl%7Cfde2a8fe4bb1489a2c9208d8efc1f73b%7Ca0f1cacd618c4403b94576fb3d6874e5%7C1%7C0%7C637522963646715003%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=DdbFcLmqtrGI%2B0FCC6AbSlR71jLDOARpjoAgAHVnFx8%3D&reserved=0).
* The submissions of the ESAS special issue topic of **“e-Health and Staying Smarter”**for the ***Expert Systems: The Journal of Knowledge Engineering (IF 1.505)*** resulted actually in the following two SIs and additional three regular papers in the **February issue of 2020**: (<https://onlinelibrary.wiley.com/toc/14680394/2020/37/1>):
	+ *Special Issue on Disease Classification for Smart Health. Expert Systems*, 37/1. <https://doi.org/10.1111/exsy.12517>. <https://onlinelibrary.wiley.com/doi/full/10.1111/exsy.12517>
	+ *Special Issue on Ontology‐Based Smart Medical Solutions. Expert Systems,*37/1. <https://doi.org/10.1111/exsy.12518>

Likewise, ***a*** ***book project for the current and past ESAS papers*** is likely to be offered; more to follow.

**PC LIST:**

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| --- |
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**Paper Submission:**

**Submissions:** Submit your paper (**up to six pages in the prescribed format**) **to EasyChair online by using the "Paper Submission" link from the ESAS 2023 page.**

* Please see the drop-down menu tab **“information-for-authors” at**  https://ieeecompsac.computer.org/2023/esas-2023/
* **Paper format**: <https://ieeecompsac.computer.org/2023/information-for-authors/>

**Accepted papers will be published in COMPSAC Proceedings at IEEE Xplore which is indexed by several popular indexing services.**

**Workshop Organizers:**

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