



## Expert Systems: The Journal of Knowledge Engineering

*Special Issue Call for Papers*

**“Special Issue on e-Health and Staying Smarter”**

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### GUEST EDITORS:

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### CONTRIBUTIONS:

**Expert Systems: The Journal of Knowledge Engineering** invites submissions for a special issue on **“e-Health and Staying Smarter”**. Papers covering state-of-the-art research in expert systems knowledge engineering in relation to e-health and staying healthy smarter are welcome.

This special issue is primarily intended for revised and substantially extended versions of selected papers presented at **the IEEE International Workshop on E-Health Systems and Web Technologies (ESAS 2018)**. Additionally, this CFP is open to all potential authors.

ESAS Workshops have been held since 2006 in conjunction with annual **IEEE International Computer Software and Applications Conferences (COMPSAC)**. Beginning 2006, COMPSAC is designated as the IEEE Computer Society Signature Conference on Software Technology and Applications.

Submitted articles must not have been previously published or currently submitted for publication elsewhere. The authors of ESAS 2018 papers should include a brief statement in their submission to indicate the way in which the article differs from their workshop paper and especially comment on the additional original content and contributions.

IEEE ESAS 2018 Workshop fosters the following complementary objectives:

- i. Inquiring into the theory and practice of engineering e-health systems, especially methods, means, and best cases;
- ii. Exploring into unifying software engineering methodologies employed in implementing e-health applications across domains also preserving security and privacy of patient health records; and,
- iii. Deploying new technologies in big data analytics, knowledgebased expert systems, machine learning, data mining and semantic or otherwise Web technologies towards affecting e-health/m-health systems especially for distributed healthcare for all.

### THEME:

E-Health systems play a significant role in the well-being of individuals, be it as medical solutions or for healthcare towards everyday wellbeing of individuals. New models and methods continue to be developed to produce safer healthcare environments. The rapid growth of using such approaches and technologies in medical fields has generated new opportunities for improvement of emerging applications. However, huge challenges are yet to be resolved in order to develop consistent, suitable, safe, flexible, and power-efficient systems fit for medical needs. In unison with the main conference 42<sup>nd</sup> IEEE CS COMPSAC, the main theme of ESAS 2018 will be applying Big Data, Web Technologies and machine learning in Agent-Oriented Software Engineering for “Staying Smarter in a Smartening World”.

## SCOPE:

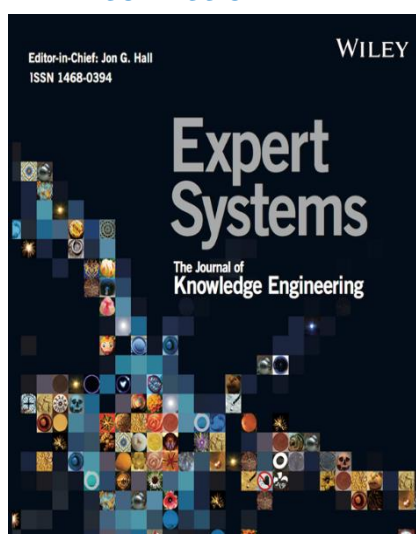
Research and industry papers on approaches and applications of big data analytics, knowledge based expert systems, machine learning, data mining, security, privacy, and current Web technologies based on e-health/m-health systems are welcome. Topics of interest span a wide spectrum in both theory and practice of the following systems: autonomous web based intelligent agents, web services, software agents, mobile systems, intelligent systems, architectures, expert systems, big data solutions, machine learning approaches, multi-agent, emerging, mobile, cloud, diagnosis and monitoring, medical feedbacks, agent communities, develop, image and video processing, ontology, inferencing, safety & security, QoS issues, privacy and other related topics. Authors are invited to submit original technical papers and novel research contributions in any aspect of e-health involving expert systems – knowledge engineering and covering but not limited to the topics of interest listed below.

***Papers addressing one or more of the topics on e-health through expert systems and knowledge engineering below are of particular interest:***

- Autonomic analysis, monitoring and situation alertness
- e-health big data: Access, aggregation and use
- Body sensor networks and wearable sensor systems on e-health
- Medical biofeedback
- Medical decision support expert systems and tools
- Context awareness and autonomous computing for ambient assisted living
- e-health oriented software architectures (agents, SOA, middleware, etc.)
- e-health virtual and augmented reality
- Emerging e-health applications
- Mobile e-health applications
- Health grid and health cloud
- Health monitoring and traffic classification
- Healthcare management systems
- ICT-enabled personal health system
- Image and video processing for e-health
- e-health devices and smart parts for healthcare systems
- Semantic Web and e-health systems
- Ontology engineering and inferencing on e-health systems
- Semantic rule-based processing in e-health
- Security, privacy and protection of personal data in e-health systems
- Innovative case studies.

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## PAPER SUBMISSION:



- Online ISSN: 1468-0394, Published by Wiley.

- Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other venues.
- All papers will be reviewed following standard reviewing procedures for the Expert Systems.
- Papers must be prepared in accordance with the Journal guidelines: [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1468-0394](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0394). Please thoroughly read these before submitting a manuscript. Each paper will go through a rigorous review process.
- **Submit manuscripts to:** <http://mc.manuscriptcentral.com/exsy>. Choose “**e-Health and Staying Smarter**” special Issue as article type.
- **Expert Systems: The Journal of Knowledge Engineering, Web Site:** [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1468-0394](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0394)
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- **Science Citation Index Expanded (Clarivate Analytics)**

## IMPORTANT DATES:

- **Paper Submission: August 10, 2018.**
  - **First Round of Reviews: October 1, 2018.**
  - **Submission of Revision: November 1, 2018.**
  - **Decision of Acceptance: December 1, 2018.**
  - **Publication: At the discretion of the EiC but probably in 2019**
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## GUEST EDITOR BIOS:

**Atilla ELCI** is Full Professor and the emeritus chairman of Department of Electrical-Electronics and Computer Engineering at Aksaray University, Turkey (2012-7). He has served in Computer Engineering departments in various universities including METU, Turkey and EMU, TRNC, since 1976. His professional practice includes the International Telecommunication Union (ITU), Switzerland, as chief technical advisor for field projects on computerization of telecommunication administrations of member countries (1985-97) and Information Technology & Telecommunications Pvt. Ltd. as founder/managing director, Turkey (1997-2003). He has organized IEEE COMPSAC & ESAS since 2006, SIN Conferences since 2007, IJRCS Symposiums 2008-9, ICPCA\_SWS 2012 and, LightSec 2016. He has published over a hundred journal and conference papers and book chapters; co-authored a book titled *The Composition of OWL-S based Atomic Processes* (LAP Lambert, 2011); edited *the Semantic Agent Systems* (Springer, 2011), *Theory and Practice of Cryptography Solutions for Secure Information Systems* (IGI Global, 2013), *The Handbook of Applied Learning Theory and Design in Modern Education* (IGI Global, 2016), *Metacognition and Successful Learning Strategies in Higher Education* (IGI Global, 2017), *Contemporary Perspectives on Web-Based Systems* (IGI Global, May 2018) and the proceedings of SIN Conferences 2007-17 (ACM), ESAS 2006-17 (IEEE CS). He is an associate editor of *Expert Systems: The Journal of Knowledge Engineering* and editorial board member of *MTAP*, *JSCI*, *IJAS*, *IJISS*, and guest editor for several other journals. He has delivered several keynote/invited talks and served as board member and reviewer for numerous conferences.

**Duygu Çelik ERTUGRUL** is Associate Professor in the Computer Engineering Department at the Eastern Mediterranean University, North Cyprus. Her research topics are related to the Web and Semantics; Composition and Discovery of Semantic Web Services, Semantic Search Agents, Rule-Based Expert Systems, m-Health/e-Health and Healthcare Knowledgebase Systems. She is one of the organizers of two international workshops and one international symposium: "IEEE International Workshop on E-Health Systems and Web Technologies (ESAS 2018)", "Security of Information and Networks (SIN)" and "IEEE COMPSAC Symposium on Web Technologies & Data Analytics (WEDA)". She also supervises various research and development projects supported by universities, government, and industrial companies. She has published numerous articles in several international/national journals and conferences on the topic of Web Technologies (Web 2.0. and Web 3.0) and Mobile Medical Healthcare Services and Systems. She is also the author of various books or book chapters about 'Composition & Discovery of Semantic Web Services' and 'Semantic Web based m-Health/e-Health Services'.