Journal of Healthcare Informatics Research
~Special Issue Call for Papers~

Special Issue on Healthcare Knowledge Discovery and Management

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Journal of Healthcare Informatics Research invites papers for a special issue on Healthcare Knowledge Discovery and Management.

SCOPE:
Healthcare informatics research is a scientific endeavor that investigates the use of informatics and data science approaches for addressing healthcare needs in order to optimize both health service and patient care outcomes. With the wide adoption of electronic health records (EHRs) as well as the movement of big data, there is a need to the use of informatics and data science techniques to perform dynamic and intelligent learning from complicated healthcare data. In addition to providing solutions purely based on data, knowledge oriented approaches have been widely used to combine with data analysis for the purpose of distant supervision. In this special issue, we are interested in the novel findings from both data-driven and knowledge-driven perspectives and the latest investigation in leveraging informatics and data science techniques for healthcare knowledge discovery and management.

This special issue is to provide a forum for researchers from both academia and industry to share their latest achievements in Healthcare Knowledge Discovery and Management. Papers addressing one or more of the topics below are of particular interests:

I. Knowledge Discovery and Data Mining in Healthcare
   - Natural language processing in patient care and public health
   - Machine learning and statistical approaches for healthcare data mining
   - Rule-based systems for analyzing healthcare data
   - Semantic annotation on healthcare data
   - Information retrieval in electronic health records (EHR)
   - Entity linking between free text and (semi)structured data

II. Deep Learning in Healthcare
   - Applications of deep learning in medical image analysis
   - Deep representation or word embedding for medical concepts
   - Big data technologies for assisting patients and physicians
   - Distributed deep models for Internet healthcare data
   - Deep learning for real-time clinical trial

III. Healthcare Data Normalization and Management
   - Integration of heterogeneous healthcare data sources
   - Healthcare data standardization and normalization
   - Healthcare data representation utilizing Ontology matching and data model schema
   - Semantic reasoning and inference
   - Databases for healthcare data management
   - Large-scale healthcare data management system (continued on page 2)
IV. Others

- Healthcare data visualization
- Healthcare ontologies and model visualization
- Crowdsourcing applications in healthcare domain
- Cognitive computing in healthcare

IMPORTANT DATES:

- Paper submission deadline: November 3, 2017
- First Decision to Authors: February 9, 2018
- Final manuscript due: March 16, 2018