

Call for Papers

Special Issue on AI Applications in E-Commerce



The official journal of the International Society for Business and Industrial Statistics, *Applied Stochastic Models in Business and Industry* (ASMBI), is inviting submissions of papers presented at the AI Applications in E-Commerce workshop of the International Joint Conference on Artificial Intelligence (IJCAI) 2017.

The call is open also to any paper in this field, regardless of the attendance at the workshop.

In 2016, retail e-commerce sales worldwide amounted close to 2 trillion US dollars and e-retail revenues are projected to grow to 3.4 trillion US dollars in 2019. However, the rapid transition from the brick-and-mortar shops of old economy is still heavily limited by technology – specifically, the limitations of online product searches, which, especially compared to a conversation with a real world sales associate, return far too many irrelevant and unspecific results to be of reliably convenient use. The key to unlocking the next wave of e-commerce disruption has arrived, this time with the advent of artificial intelligence (AI).

We aim to bring the attention of researchers to real problems with AI applications in E-Commerce, ranging from search, recommendation, (re)targeting, information retrieval and natural language processing (NLP) that belong to the regular IT areas, to the business advisory ChatBot belonging to the hot arising areas, etc. In the recent past years, researchers have proposed various AI techniques in the above mentioned application areas.

This call focuses on novel methodologies, applications and theories for effectively applying AI in E-Commerce. We encourage submissions on a variety of topics focusing on addressing specific aspects of importance in E-Commerce from AI perspective, including but not limited to:

1. Address theoretical contributions to an established field commonly used in E-Commerce system, or provide that a known problem can be solved in a novel way, e.g., visitor web behavior modeling and visualization, intention and sentiment analysis, recommendation and personalization systems, anomaly or change point detection in streaming data, data cleansing and real time bidding optimization in online advertising.
2. Understanding customers intent from unstructured, customer generated content (queries, reviews).
3. Control / optimization of business metrics via E-Commerce experiences that match customers to products (search, recommendations, advertising).

4. Attribution of customer-generated events / metrics (clicks, conversions, revenue) to specific components of a system (multi-touch attribution problem).
5. Computational economics, Mechanism Design for e-commerce platform using multi-agent learning.
6. ChatBot that can communicate and supply business strategies to online customers and sellers.

All submissions will go through the standard, selective review process of ASMBI. Submissions are possible until July 30, 2017 through the website <http://mc.manuscriptcentral.com/asm>. Please follow the ASMBI author submission guidelines given on the ASMBI website and clicking on the box about submissions for special issues, mentioning "Workshop IJCAI2017" when requested. The Guest Editors of the special issue are Dr. Yinghui Xu (renji.xyh@taobao.com), Dr. Hongxia Yang (yang.yhx@alibaba-inc.com), Prof. Martin Ester (ester@sfu.ca), Prof. Can Wang (wcan@zju.edu.cn), Prof Jun Zhu (dcszj@mail.tsinghua.edu.cn). For any information about the ASMBI journal, please contact the Editor-in-Chief: Fabrizio Ruggeri (fabrizio@mi.imati.cnr.it).