The **2019 ACM Transactions on Multimedia Computing, Communications and Applications (TOMM) Nicolas D. Georganas Best Paper Award** is given to the paper "Deep Bi-directional Cross-triplet Embedding for Online Clothing Shopping" (TOMM vol. 14, Issue 1) by **Shuhui Jiang, Yue Wu, Yun Fu**

The purpose of the named award is to recognize the most significant work in ACM TOMM (formerly TOMCCAP) in a given calendar year. The Associate Editors of ACM TOMM were invited to nominate articles which were published during calendar year 2018. Based on the nominations the winner has been chosen by the TOMM Editorial Board. The main assessment criteria have been quality, novelty, timeliness, clarity of presentation, in addition to relevance to multimedia computing, communications, and applications.

In this article, the cross-domain (i.e., street and shop) clothing retrieval problem is addressed and its real-world applications for online clothing shopping are investigated. This is a challenging problem due to the large discrepancy between street and shop domain images. The focus is on learning an effective feature-embedding model to generate robust and discriminative feature representation across domains. Existing triplet embedding models achieve promising results by finding an embedding metric in which the distance between negative pairs is larger than the distance between positive pairs plus a margin. However, existing methods do not address the challenges in the cross-domain clothing retrieval scenario sufficiently. First, the intradomain and cross-domain data relationships need to be considered simultaneously. Second, the number of matched and nonmatched cross-domain pairs are unbalanced. To address these challenges, this paper proposes a deep cross-triplet embedding algorithm together with a cross-triplet sampling strategy. The extensive experimental evaluations demonstrate the effectiveness of the proposed algorithms well. Furthermore, two novel online shopping applications are investigated, clothing trying on and accessories recommendation, based on a unified cross-domain clothing retrieval framework.

The award honors the founding Editor-in-Chief of TOMM, Nicolas D. Georganas, for his outstanding contributions to the field of multimedia computing and his significant contributions to ACM. He exceedingly influenced the research and the whole multimedia community. The Editor-in-Chief Prof. Alberto Del Bimbo and the Editorial Board of ACM TOMM cordially congratulate the winner. The award will be presented to the authors at the ACM Multimedia 2019 in Nice, France.

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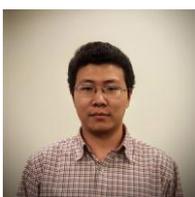
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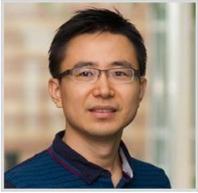
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