#### The 4th International Workshop on

# INTERACTIVE AND SCALABLE INFORMATION RETRIEVAL METHODS FOR E-COMMERCE

(ISIR-eCom 2025)

# Call For Papers

Workshop website: <a href="https://isir-ecom.github.io/">https://isir-ecom.github.io/</a>

### **Important Dates:**

Submissions Due	Aug 29
Notification	Sept 15
Camera Ready Version Due	Sept 25
Workshop Day	Nov 12

#### **Description:**

This workshop will provide a forum to discuss and learn the latest trends for interactive and scalable information retrieval approaches for eCommerce. It will provide academic and industrial researchers a platform to present their latest works, share research ideas, present and discuss various challenges, and identify the areas where further research is needed. It will foster the development of a strong research community focused on solving eCommerce-related information retrieval problems that provide superior eCommerce experience to all users.

Topics of interest include, but are not limited to:

- o LLMs & GenAI in eCommerce
  - LLMs for overall query understanding
  - Product review summary using LLMs
  - LLMs for recommendations
  - GenAI for query reformulation
  - GenAI for IR evaluations
- Query Understanding
  - Type-ahead/auto-completion, spell correction
  - Query intent understanding
  - Non-text query understanding
  - Attribute understanding
  - Implicit query intent understanding
- Product Understanding
  - Product intent and facets
  - Product knowledge graph
  - Ontology mining for product graph construction
- Product Retrieval and Ranking

- Product indexing and recall
- Scalable and real-time indexing for frequently changing products (offers, auctions, etc.)
- Recall and Ranking for multi-faceted products and multi-attributed queries
- Ranking for Relevance vs Popularity vs Business trade-offs
- Search Re-Ranking
- Personalization and Recommendation
  - Interactive Search for personalization
  - Product Question Answering
  - Context and/or location based personalization
  - User attribute based personalization
  - Personalized and Semantic Retrieval
- o Conversational Search and Recommendation
  - Multi-turn product search and recommendation
  - Conversational query understanding and re-writing
  - Clarification and preference elicitation
  - Conversational result presentation and explanation
- Cross-domain learning
  - Transfer learning for NLP
  - Cross-domain conversational search system
  - Transfer learning for cross-domain product ranking
  - Multi-modal conversational systems for eCommerce
- Other Topics
  - Feature learning for eCommerce search
  - Search & Recommendations: Fairness and trust for marketplaces
  - Balancing sponsorship vs relevance tread off in search results
  - Robust training objective and effective experimental strategy for IR models
  - End-to-End solution for interactive and scalable search framework

#### **Submission Instructions:**

All papers will be peer reviewed (single-blind) by the program committee and judged by their relevance to the workshop, especially to the main themes identified above, and their potential to generate discussion.

All submissions must be in PDF format according to the latest he IEEE 2-column format (<a href="https://www.ieee.org/conferences/publishing/templates.html">https://www.ieee.org/conferences/publishing/templates.html</a>). Submissions must describe work that is not previously published, not accepted for publication elsewhere, and not currently under review elsewhere. All submissions must be in English. We invite researchers to contribute as full research papers and/or short papers. Full workshop papers should not exceed 10 pages in length and short papers must be up to 5 pages.

Please note that at least one of the authors of each accepted paper must register for the workshop and attend the session in-person to present the paper during the workshop.

Submissions to ISIR-eCom 2025 workshop should be using cyberchair system: <a href="https://wi-lab.com/cyberchair/2025/icdm25/scripts/ws-submit.php?subarea=S">https://wi-lab.com/cyberchair/2025/icdm25/scripts/ws-submit.php?subarea=S</a>

## **Organizers:**

• Vachik S. Dave Walmart Global Tech

• Linsey Pang Salesforce

• Xiquan Cui The Home Depot

• Chen Luo Amazon

Hamed Zamani University of Massachusetts, Amherst
George Karypis University of Minnesota Twint-cities

#### Contact us:

Please send questions and enquiries to <a href="mailto:isir.ecom.workshop@gmail.com">isir.ecom.workshop@gmail.com</a>