



Cyprus
University of
Technology

Studies and
Student Welfare
Services

Doctoral Vacancy Announcement form

Research Topic Title: Personality-based Sequential Recommendation in eCommerce.

No. of Openings: 1

Description:

In the era of big data, individuals are confronted with an overwhelming abundance of information across diverse digital platforms. Efficiently identifying relevant and valuable content has become a critical challenge. Recommender Systems (RS) have emerged as a powerful computational solution to mitigate information overload by filtering content and providing personalized suggestions that match user preferences. From e-commerce platforms such as Amazon to streaming services like Netflix and YouTube, recommender systems form a foundational component of user engagement and retention strategies.

Traditional recommender systems primarily rely on user–item interactions, where users express preferences through explicit ratings or implicit behaviors (e.g., clicks, purchases, or views). These interactions are typically represented as a user–item matrix, which forms the basis for algorithms such as Collaborative Filtering. Despite their effectiveness, these methods assume static user preferences, disregarding temporal dynamics and the evolving nature of user interests. Additionally, traditional models do not account for the influence of situational or psychological factors that shape human decision-making.

Sequential Recommender Systems address these limitations by modeling user behavior as a sequence of interactions over time. The goal is to predict the next likely item a user will interact with, given their historical sequence. Sequential recommender systems form the foundational technology behind key features such as “Next video” recommendations on platforms like YouTube and Netflix, “Next Item to Purchase” on e-commerce sites like Amazon.

While sequential models effectively capture *what* users do and *when* they do it, they provide limited insight into *why* users behave as they do. Personality-aware recommender systems integrate psychological traits such as Big Five dimensions (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism), to model intrinsic user

characteristics that influence preferences and decision patterns. Studies have demonstrated the value of personality integration in recommenders in various domains such as tourism and hospitality, with personality-informed models improving destination recommendations. However, despite their strengths, the integration of personality modeling into sequential recommendation frameworks remains an emerging research frontier.

This Ph.D. will explore the intersection of sequential recommendation and personality modeling in the context of e-commerce. It seeks to enhance existing sequence-based recommendation models by incorporating stable personality traits, thereby enabling more personalized, psychologically informed, and adaptive product/service recommendations

Required Qualifications: Knowledge of Machine learning, Algorithmic Marketing, eMarketing, Programming in Python.

Funding: N/A

Research advisor: Andreas Gregoriades

Position: Associate Professor of Information Systems

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Doctoral Vacancy Announcement form

Research Topic Title: Mixed Reality (MR) and Customer Experiences (CX)

No. of Openings: 2

Description:

The PhD candidate will focus on exploring Mixed Reality (MR) and its role in enriching Customer Experiences (CX). The aim is to develop innovative MR solutions that can redefine how businesses interact with their customers, enhancing engagement, satisfaction, and value creation across various sectors.

The research will investigate the integration of MR technologies in customer experiences, examining how MR can create realistic, interactive, and personalized experiences that merge the physical and digital worlds.

Areas of interest include, but are not limited to: MR in retail and the fashion industry, virtual try-ons using smart glasses, interactive advertising and immersive storytelling, gamified customer experiences, and personalized CX based on behavioural and emotional data.

Interested candidates are required to submit the following:

1. A Detailed CV: including academic background, relevant work experience, and any publications.
2. A research proposal (max 2000 words): outlining your vision for how AR can enrich customer experiences, including potential research questions, proposed methodology, and how the research aims to contribute to the existing body of knowledge.
3. Academic Transcripts and Certificates: To be submitted at a later stage along with letters of recommendation.

Funding: Candidates have the opportunity to receive financial support through Teaching Assistant positions, competitive scholarships, or by joining active, externally funded research projects within the Cyprus University of Technology.

Required Qualifications:

- A Master's degree in Marketing or a related field / or Computer Science (but preferably with an undergraduate degree in Social Sciences or Business Studies) or a related field, with a strong academic record.
- Experience in AR technologies, including development platforms (e.g., ARKit, ARCore) and 3D modelling tools, and a proficiency in programming languages relevant to AR development (e.g., C#, Java, Python) will be considered an advantage.
- Excellent analytical, research, and communication skills.
- Ability to work independently and as part of a team.

Research Advisor:

Name/Surname: Yioula Melanthiou

Position: Assistant Professor

Email: yioula.melanthiou@cut.ac.cy