

# Edoardo D'Amico

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## EDUCATION

### UNIVERSITY COLLEGE OF DUBLIN (UCD)

PHD | GRAPH REPRESENTATION LEARNING

Jan. 2020 - Now | Dublin, IR  
Graph-based recommender systems.

### POLITECNICO DI MILANO

MS | COMPUTER SCIENCE

Sep. 2017 - Dec. 2019 | Milano, IT  
Followed the Artificial Intelligence track.

GPA: 28.75 / 30

Grade: 110 with honors / 110

### UNIVERSITÀ DEGLI STUDI DI PERUGIA

BS | INFORMATICA AND ELECTRONIC ENGINEERING

Sep. 2014 - Jul. 2017 | Perugia, IT  
Graduated in 2 years and 7 months with an exceeding number of credits.

CFU: 183 / 180

GPA: 27.06 / 30

Grade: 106 / 110

## LINKS

Github:// [damicoedoardo](#)

LinkedIn:// [damicoedoardo](#)

## COURSEWORK

### MASTER

Recommender Systems

Deep learning

Machine learning

Artificial Intelligence

Data mining and text mining

Natural language processing

Computer vision & Image analysis

Soft computing

Autonomous agents systems

Software engineering

Model identification & Data analysis

Data bases 2

## SKILLS

### PROGRAMMING

- Python

- Java

Familiar:

- C • C++

## PUBLICATIONS

1. Edoardo D'Amico, Khalil Muhammad, Elias Tragos, Neil Hurley, Barry Smith, Aonghus Lawlor.  
**Item Graph Convolutional Collaborative Filtering for Inductive Recommendations.**  
(Accepted) In *European Conference on Information Retrieval (ECIR'23)*.
2. Edoardo D'Amico, Giovanni Gabbolini, Cesare Bernardis, Paolo Cremonesi.  
**Analyzing and improving stability of matrix factorization for recommender systems.**  
*Journal of Intelligent Information Systems, Jan. 2022, doi:10.1007/s10844-021-00686-1.*
3. Edoardo D'Amico, Giovanni Gabbolini, Cesare Bernardis, Paolo Cremonesi.  
**On the instability of embeddings for recommender systems: the case of Matrix Factorization.**  
*In Proceedings of the 36th ACM/SIGAPP Symposium on Applied Computing (SAC'21), March 22–26, 2021, Republic of Korea. ACM, New York, NY, USA, 8 pages.*
4. Edoardo D'Amico, Giovanni Gabbolini, Daniele Montesi, Matteo Moreschini, Federico Parroni, Federico Piccinini, Alberto Rossettini, Alessio Russo Introito, Cesare Bernardis, and Maurizio Ferrari Dacrema.  
**Leveraging laziness, Browsing-Pattern Aware Stacked Models for Sequential Accommodation Learning to Rank.**  
*In Proceedings of the ACM Recommender Systems Challenge 2019 (RecSys'19) , September 16–20, 2019, Copenhagen, Denmark.*

## MAIN PROJECTS

### ACM RECSYS CHALLENGE 2019 ACM CHALLENGE | MAR-JUL 2019

Recommender Systems, Python, AWS, Pandas, Learning to rank, Tensorflow

Organized by Trivago for the 13th ACM Conference on Recommender Systems. The goal was to develop a session-based and context-aware recommender system.

- **Final position:** 10 over 585 groups (**top 2%**).
- Implemented two among four algorithms used in the final model (Tensorflow ranking, LightGBM), automated the search of the optimal parameters.

### H&M PERSONALIZED FASHION RECOMMENDATION | KAGGLE | FEB-MAY 2022

Recommender Systems, LightGBM, Tensorflow

Kaggle challenge sponsored from H&M (Link). In this competition, H&M Group ask the development of a product recommendation algorithm based on data from previous transactions, as well as from customer and product meta data.

- **Final Position:** 43 over 2954 teams (**top 2%**)
- Implemented end to end recommender systems pipeline for real-world fashion recommendations (GitHub link).

### ACM RECSYS CHALLENGE 2022 ACM CHALLENGE | APR-JUNE 2022

Recommender Systems, Python, Pytorch, Numpy, Pandas, Learnin to rank

Organized by Dressipi for the 16th ACM Conference on Recommender Systems. The goal was to develop a session-based recommender systems for fashion domain recommendations.

- **Final position:** 18 over 303 teams (**top 6%**).
- Participated as a single person team, implemented end to end multi-stage recommendation pipeline. (GitHub link).