Aayush Singha Roy

Mail: asrthebest17@gmail.com Recommendation : Neil Hurley, neil.hurley@ucd.ie

EDUCATION

UNIVERSITY COLLEGE OF DUBLIN (UCD)
PhD | Recommender Systems
Jan. 2022 - Dec. 2025 | Dublin, IR
Session-based recommender systems.

INDIAN INSTITUTE OF TECH. DELHI
MS Research | Information Technology
Jun. 2019 - Oct. 2021 | New Delhi, IN
Followed the Artificial Intelligence track.
GPA: 8.64 / 10

NATIONAL INSTITUTE OF TECH. AGARTALA
BS | Mathematics
Aug. 2015 - May. 2019 | Agartala, IN
Focused on Mathematics and Computing.
GPA: 8.17 / 10

LINKS

Website: **aayushroy**
Github: **aayushroy**
LinkedIn: **aayushroy**
Scholar: **aayushroy**
Twitter: **aayushroy**

WORK EX.

•Procter & Gamble, Dec 25 - Feb 26
Data Science Manager
•ANZ Operations & Tech., June - Dec 2021
Graduate Engineer

COURSEWORK

BACHELOR AND MASTERS
Advanced Machine Learning (M)
Machine Learning (M)
Data Mining (M)
Game Theory (M)
Fuzzy Logic (M)
Linear Algebra (B)
Data Structures and Algorithms (B)
Probability and Statistics (B)
Introduction to Artificial Intelligence (B)

SKILLS

PROGRAMMING
• Python
• Java
Familiar:
• C • C++

PUBLICATIONS

1. Aayush Singha Roy, Elias Tragos, Aonghus Lawlor, Neil Hurley
   SlateLLM : Distilling LLM Semantics into Session-Aware Slate Recommendation without Inference Overhead
   In Proceedings of *19th ACM Conference on Recommender Systems* (RecSys'25)

2. Aayush Singha Roy, Edoardo D'Amico, Elias Tragos, Aonghus Lawlor, Neil Hurley.
   Don't Get Bored: Enhancing Scalability and Diversity in Session-Based Slate Recommendation
   ACM Transactions on Recommender Systems (TORS)

3. Aayush Singha Roy, Elias Tragos, Aonghus Lawlor, Neil Hurley
   Simulating Real-World News Consumption: Deep Q-Learning for Diverse User-Centric Slate Recommendations
   In INRA Workshop of *18th ACM Conference on Recommender Systems* (RecSys'24)

4. Aayush Singha Roy, Edoardo D'Amico, Elias Tragos, Aonghus Lawlor, Neil Hurley.
   Scalable Deep-Q Learning for Session-based Slate Recommendation
   In Proceedings of *17th ACM Conference on Recommender Systems* (RecSys'23)

5. Aayush Singha Roy, Aonghus Lawlor, Neil Hurley
   Modelling User Preferences using a Partially Observed Markov Decision Problem for a Reinforcement Learning Sequence- Aware Recommender
   In Reveal Workshop of *16th ACM Conference on Recommender Systems* (RecSys'22)

6. Aayush Singha Roy, Edoardo D'Amico, Aonghus Lawlor, Neil Hurley.
   Addressing Fast Changing Fashion Trends in Multi-Stage Recommender Systems
   In Proceedings of *International Flairs Conference* (FLAIRS'23).

CURRENT ROLE

RESEARCH SCIENTIST | NielsenIQ - Pune | May 2026 - Present
Working within Recommender Systems Group in Core Models Team as part of the Architecture and Innovation Wing.

PROJECTS & INTERNSHIPS (DURING PHD)

PHD INTERN | Adobe Research - Bangalore | May-Aug 2025
Generating Marketing Strategies
Multi-Agent Pipeline

MDSR LAB PHD INTERN | Adobe - Noida | Jun-Aug 2024
Planning with LLMs
Tree-based techniques for Planning Algorithms

H&M FASHION RECOMMENDATION | Kaggle | Feb-May 2022
Recommender Systems, LightGBM, Tensorflow
Kaggle challenge sponsored from H&M (Link).

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