

Aayush Singha Roy

Mail: aayush.singharoy@insight-centre.org

EDUCATION

UNIVERSITY COLLEGE OF DUBLIN (UCD)

PHD | RECOMMENDER SYSTEMS

Jan. 2022 - Now | Dublin, IR
Session-based recommender systems.
Expected Graduation - 12/25

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

 Github: [aayushroy](#)
 LinkedIn: [aayushroy](#)
 Scholar: [aayushroy](#)
 Twitter: [aayushroy](#)

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++

RESEARCH WORK

1. Aayush Singha Roy, Edoardo D'Amico, Elias Tragos, Aonghus Lawlor, Neil Hurley.
Scalable Deep-Q Learning for Session-based Slate Recommendation
(Accepted) In Proceedings of 17th ACM Conference on Recommender Systems (RecSys'23)
2. 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)
3. 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).
4. Aayush Singha Roy.
Masters Thesis : Application of Rough sets for Rule Generation and Keyword Extraction
Pub 1: Soft Rough Set based span for unsupervised keyword extraction
Pub 2: Forecasting of Indian stock market using rough set and fuzzy-rough set based models

WORK EXPERIENCE

GRADUATE ENGINEER

ANZ OPERATIONS & TECH. BANGALORE, IN | JUNE - DEC 2021

I was the first starting members in the ideation squad. Helped build payments playstream application to recommend training videos to employees and gamification workflow for higher employee engagement.

PROJECTS & INTERNSHIPS

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).

RESEARCH INTERN NOKIA - NOIDA, IN | MAY-JUL 2019

Computer Vision, Python, Pandas, 3D Bin Packing Optimization, Tensorflow
Worked on object recognition using CNNs for lego brick type objects and also automated 3D bin packing problem for optimal usage and packaging of items for shipment.

RESEARCH ASSOCIATE XLRI - JAMSHEDPUR, IN | DEC, 2017-MAY 2019

IPA Analysis, HOQ Model, Kano Categorization

Identification of important attributes for student driven mess facilities in Indian Universities through Kano Categorization and other statistical methods using Importance Performance Analysis.

- Assessment of residential institute foodservice using Kano categorization and importance-performance analysis. (Paper link).