

DSA5201 PROJECT PROPOSAL FORM

Student Name: _____Liu Boyu_____ Student ID: _____A0177847J_____

EXTERNAL ADVISOR/SUPERVISOR'S INFO

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Company/Institute: Shopee Private Limited Singapore

TITLE

Algorithm Engineer

DESCRIPTION OF PROJECT (minimum 100 words, maximum 500 words)

Recommendation systems are a very popular and effective paradigm in retail business. With a recommendation system, shoppers can find items they like with less effort. Furthermore, they are presented with items they've never thought of buying, but which actually suits their needs.

Considering the sheer volume of user-item pairs, it is intractable to exhaustively score every item for every user within the serving latency requirements. Therefore, the first step of recommendation upon a user visit is retrieval. This process returns a short list of vouchers that best match the user's interest using various signals, usually a combination of machine-learned models and human-defined rules. After reducing the candidate pool, the online ranker will then provide the final score and serve the final selected vouchers to the users based on score ranking.

My work in Shopee is to maintain and optimize existing recommendation flows. Meanwhile, for new business scenarios, my work also includes building new recommendation frameworks.

EXPECTATION/S

The student would be expected to work on improving and optimizing the current retrieval framework.

- Maintain current existing recommendation pipelines
- Build new recall queue to improve GMV and ctr/cvr
- Analyze data pattern, improve performance of ranking model

COMPANY'S INFORMATION

Company's short profile:

Shopee Pte. Ltd., doing business as Shopee, is a Singaporean multinational technology company specialising in e-commerce. It is a subsidiary company of Sea Limited. It was launched in 2015 in Singapore, before its global expansion.

Company location (Street address, city, Country):

5 Science Park Dr, Singapore 118265