

INFORMATION ON DOCTORAL DISSERTATION

Title of the thesis:

BEHAVIOR MODELING AND USER'S INTEREST IN SOCIAL NETWORKS

Specified field of study: Information System

Code of specialty: 9.48.01.04

Name of the candidate: **Nguyen Thi Hoi**

Name of the research supervisors:

1. Assoc.Prof. PhD. Tran Dinh Que

2. Assoc.Prof. PhD. Dam Gia Manh

Academic Institution: Posts and Telecommunications Institute of Technology

THE SCIENTIFIC CONTRIBUTIONS

The scientific contributions of the thesis are as follows:

(1) Proposed models

- Proposing an entry representation model based on five attributes including content, category, tags, sentiment and emotions via a feature vector.
- Proposing an user representation model based on three behaviors including posting or sharing an entry, liking an entry and joining a group in social networks. The user's behaviors is estimated base on the entry model which has five attributes and groups that users have joined
- Proposing a similar measure between two users base on the user representation model by an entry and the user representation model by behaviors. Estimate the interest of people according to topics based on the correlation among entries and behavior with topics

(2) Methods of estimation and calculation

- Estimate the user's similarity in social networking based on the similarity between two entries and based on the similarty between two users via feature vetors.
- Estimate the user's interest in social network based on correlation between set of entry and topics, and between user's behavior and topics.
- Estimate the correlation between user similarity measure and the user's interest of topics on social networks.

ON PRACTICAL APPLICABILITY AND FURTHER STUDIES

- The research results of the thesis can be used to classify entry to topics, to classify users' interest based on behavior, can be applied in customer classification systems, recommendation and predict customer behavior based on the similarity measure among customers.
- Due to the limited time for implementation of the topic, there are still many related issues that need to be further studied, such as:
 - Research, analysis and processing of image data, sound data, and film data
 - Research issues of changing topics of interest when the time is changed
 - Collecting and presenting a standard Vietnamese data set for Vietnamese social surveys, research and analysis

RESEARCH SUPERVISORS

PHD STUDENT

Assoc. Professor, Ph.D Tran Dinh Que

Nguyen Thi Hoi