Human-Computer Interaction and Data Mining

This research is in the social networking space. We have been working on a project using Facebook to investigate how people understand and interpret their social feeds. This project involved volunteers’ Facebook profiles from which we could extract data and analyze it. The motivation behind this project involves learning about data mining and human computer interaction. We have an aim to gain insight into Facebook’s users’ perceptions of how Facebook filters what they see on their News Feed and how satisfied they are with this filtering featuring.

We started this research by inviting volunteers to open their Facebook account and open the application made by my mentor. The application provides a chronological list of seen and not seen posts. After the subject reviews the page, we ask them questions regarding their satisfaction with the apparent filtering process and whether they sense a pattern of which posts are filtered and which posts are not. We also go through with the volunteer which of their friends’ post the volunteer sees most often. We also allow them to pick and choose which posts which they would like to see and which ones they would not which obviously does not change their Facebook setting but it does provide us great insight in how an average consumer reacts. We have also integrated a visualization in the app where a user can see which of their friends’ posts they have seen most and whose they have not. This information becomes vital because it gives us an insight into how dissatisfied they are with the current filtering system of Facebook.

I have learnt many different things till now and I believe I will keep on learning. We are learning about PHP, a scripting language and a database language MySQL. We are learning about database creation and management. Through PHP, we are learning dynamic web
programming. This skill will help me build a better User Interface for this project and my future ones. Through the use of this application, we are also learning how to work with Facebook API which will help me in the future should I decide to work with it. My mentor has also introduced me to programming frameworks like Django, Ninja 2 and Yii. We will be working with the Yii framework. We have learnt that frameworks provide us an easy way to implement features you our project without actually spending time to code those features starting from scratch. This prevents us from worrying about redundant code and helps us concentrate on the real issues at hand. We will also be learning how to parse documents. We will parse the interview transcriptions in order to accumulate the data in a systematic way.

After the accumulation of data is done, we will move onto optimization of the Facebook app made by my mentor and we would also like to publish that app on Facebook if our paper is received well in the community.

Overall, I have learnt a lot till now and I will continue to learn. We hope to build an app after this research project is done and publish this application on Facebook so that a lot more people will be able to change their preferences and settings. I