Reflection Paper

This semester, I took Course Core methods and education data mining which gave me a new perspective and insight into education science.

Education has always attracted me, and I prefer to use tools to practically solve problems in education than to portray education in words. Before I took this course, I have only been exposed to analytical tools in few math classes in undergraduate university, which Python was not related to education for me. The course description made great impressions on me before I even began to fall into this course, and my goal was to gain a deeper understanding of big data and to be capable of using analytical tools to investigate and solve problems in educational fields.

During the three-month course of study, I harvest the knowledge of education data mining, including solving common problems in education with analytical methods and tools, exploring and evaluating real-world educational issues with EDM methods. Moreover, due to the initial lack of clarity on data analysis methods, analysis challenge assignment became the most challenging part for me; however, I made rapid progress in using of analytical tools through studying the resources provided in ICEs. Essentially, I discovered the interesting points of ACA as I learned more about EDM knowledge, that the main purpose of the ACA in my opinion was to merge EDM methods and real problems in educational fields and conduct analysis with analytical tools. The most absorbing ACA I think is ACA4 which is related to social network analysis. In this assignment, my group members and I gave full play to our imagination to conceive our network. Honestly, the process of considering was to explore step by step to gain the

consummate network setup. We overturned our ideas many times, and then came up with a better way to achieve it, and my understanding of SNA became deeper during the process combining communication and consideration. In addition, final project can be seen as a challenging chance for me to conduct simulations to analyze the real-world issue in educational fields. My group put a slew of effort on considering the topic of the project; Simultaneously, it is also a challenge to determine the corresponding method for solving the problem. Furthermore, I once again felt the fascination of education data mining during the process of final project, and to make use of analytical approaches to deal with real problems was what I was eager to do.

Critically, I have achieved my goal on this course. The course enabled me to understand the use of EDM methods and the analysis methods to focus on when dealing with various type of data. On top of that, the analysis methods learned this semester can be taken advantage to deal with other problems about big data analysis. For my future career, there is no doubt that this course started the exploration of big data analytics, and I would like to learn and try more analytical methods to the benefit of education data mining methods.