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I have cultivated my great interest in interdisciplinary fields of physics, mathematics and computer science since I was middle school student. I attended a county-level best high school, where I was armed with strong foundation in physics and won the first prize in Provincial Physics Contest. After graduation in 2008, I was admitted by School of Mathematical Sciences, UESTC. During that period, I found a constant source of pleasure in thinking logically and applying mathematics to solve specific problems in our lives. As an undergraduate, I was fascinated by mathematical modeling and won the Outstanding Winner in 2012 Interdisciplinary Contest in Modeling. As the PI, I received a university-level Outstanding-rated Science and Technology Innovation Project Grant.

In 2012, I received my B.Sc Degree (with highest honor) in Information and Computing Science from UESTC. Then, I became a Master Student in Computer Science, School of Computer Science and Engineering, UESTC. My interest has spread to complex networks and statistic physics. As a graduate, I worked with Prof. Tao Zhou, studying online ranking method, promotion/resignation predication in employee networks, etc. In parallel, I served as a research assistant to other PIs in studying recommender systems, missing value imputation, etc. In 2014 and 2015, I found summer intern in two big data company and completed two research projects.

Currently, I am a Second-year Ph.D. Student in Computer Science, UESTC. My research interests focus on understanding phenomena in social and economic systems through empirical and theoretical analysis. I am working with Prof. Tao Zhou in solving a variety of problems, including information spreading, economic structure, reputation evaluation, etc. My works have been published in some peer-reviewed journals, such as *Sci. Rep.*, *EPL*, *Physica A* and *Chin. Phys. Lett.*. The summaries of the three selected projects are as follows:

- Local Economic Structure. The growths of companies are direct reflections of the economy development. We extract the local economic structure from data of 24 million companies. We are particularly interested in the dynamic pattern of the economic structure, the spatial structure of registered capital, the economic complexity, the interdependency of sectors, etc. This project contributes to local economic trends predication.
- Spatial Social Network. Previous empirical studies of online social networks have confirmed a spatial scaling law, which may origin from optimal information collection. We investigate how the spatial organization affects information spreading in spatial social network. Numerical results suggest that the self-organization of spatial structure is to some extent relevant to the principle of least effort in human behaviour.
- Online Reputation Evaluation. Individual reputation plays the role of fundamental blocks in building up online ecosystems. Meanwhile, new challenges arise that how to evaluate online reputation? Our approach is to group users based on their rating similarities, and calculate user reputation according to the corresponding group sizes. This project highlights the positive role of grouping behavior in better reputation evaluation.

Over three years working in both empirical and theoretical projects has increased my capacity for independent research due to my deep involvement in the full process of doing a creative project. Past works amazed me to do further research in interdisciplinary areas and my background in mathematics and computer science should do well to my advanced study. As future works, I am interested in understanding phenomena in social and economic systems, such as the adjustment of macro-industrial layout in China, the gender bias in academic achievement, the optimization of information spreading on social networks, the adoption of social behaviors in reality, etc. I really enjoy working on creative projects that enhance my technical skills and challenge me on a regular basis.

Aside from research, I enjoy presenting research results and sharing recent ideas at conferences and internal project meetings. I have attended 6 nation-level conferences and given 5 contributed talks. From 2012 to 2014, I also served as a Student Instructor in the Association of Mathematical Modeling and a member of volunteer groups of UESTC. I am looking forwards to exploring new and exciting areas whether in research or in life.