Reflection of Student Summer Research Experience

During the 6-week summer research period with my Economics professor Rajaram Krishnan and a student Muskan Uprety, I had a chance to build something meaningful. The entire process of this research was full of surprises and difficult problem-solving.

Last fall, I took Economic Development class with Raja, where I got familiar with HDI (Human Development Index), the way it is calculated and how UNDP (United Nations Development Programme) measures each country's development. I also got a chance to see in which cases this method may not be so accurate. Our professor introduced an idea, the book he was working on, about DHDI (Dynamic Human Development Index) where instead of having a given fixed data of all the countries and comparing highly developed countries opportunities to under-developed ones, we can have each country's potential calculated separately. In this reflection, I will not go deep down in details, but overall this topic interested me. At the end of the semester, I got a chance to share my computer science skills to my professor and classmates where I demonstrated a web application which shows us which United State is economically similar to the rest of the world. After that, I got selected on the summer research on the topic mentioned above.

Summer research was very productive and fun; I could see the day-to-day improvements to my web application after I was adding tiny little pieces one by one. This entire experience deepened my knowledge in both Economics and Computer Science fields. Muskan was helping me a lot by giving me some theoretical understanding of the Dynamic Human Development and how can that be applied into coding. We tried to break this idea together into small pieces to work on it efficiently. This is why my understanding of discipline changed as a result of this summer experience. I saw that teamwork could give us great success in the future. I had never done any collaborative research before, especially when the professor was involved, so I enjoyed this new challenge/experience and definitely got more engaged in the research topic. I always liked the idea of development in general; I loved the ways to measure the economic growth of countries around the world and always wanted to apply my computer science knowledge in this type of field.

After my summer research, I decided to continue this line of research in the independent study format. I have already talked to my Economics professor, and I am willing to volunteer, find some time to make this project prettier and much more advanced. I could see how vital this project can be in my career. On any job interview, this project can be something constructive, something that can catch everyone's attention. I am proud of my summer research accomplishment and can not wait to continue working on it before it can be named as a "Complete" web application which other people can use.