Project Summary

The project involved building a recommendation engine on top of the human-trust software which was the research work done by last year's NASA practicum Team. The engine will provide recommendations of existing reusable artifacts, workflows and models based on scientist's domain relevance and social connections. We used five features to calculate the likelihood of two authors to co-author in the future. We used machine learning algorithms such as Naïve based and JACARD similarity to work on the training data we extracted from DBLP (Which is essentially a database for all computer science publications). It also contains lot of material for earth science publications which we used as our data source. We provided our clients a proof of concept model which can easily be integrated with NASA tool vistrails and can also be run as a standalone service.

Our advisor Dr. Jia Zhang was a great mentor throughout this project guiding us at every checkpoint to help us achieve success. NASA was our team's first real client in the graduate school and we had great time working with them.

We were a member of four people from different backgrounds. Venkatesh is a security major with a development background, He interned with E-bay in summer. Neeraj is also security major student with background in security and project management, He did his internship with Microsoft with product security group. Shuai is a graduate student with his major in Mobility. He has done an internship at Sears Holdings and is interested in big-data technology and Web and mobile development. Pujita is a graduate student with her concentration in software management. She has a background in software development and did her internship at Credit Suisse.

We also interacted with a PhD student, Chris Lee, who is researching on the same topic. He is working on the development of Vistrails for NASA. And our team will help in the transition of this project from this team to the next.