IGERT Research rotation update: October 2015

November 10, 2015

Trainee: Sayali Phadke

Host: Dr. Bruce Desmarais

Project title: Modeling interference in networks, based on field experiments

Report

During the last month, I believe that we have made some progress towards the end

goal of the research project; which is to prepare a publishable manuscript on the topic of

modeling interference in political networks, with an aim to infer causality.

• We have identified two datasets generated from previously conducted experiments.

One from the State legislature in New Hampshire and another from New Mexico.

We are working on replicating the results from the original papers that use these

datasets.

• We are working on proposing different interference models using networks based

on geographical proximity, ideological similarity and co-committee membership.

We are referring to literature from marketing and epidemiology to study various

diffusion models

• The trainee is also in the process of reading through literature on some unfamiliar

topics in this projects such as diffusion models and political networks