**Name:** Paulo Costa  
**Class:** 2014  
**Title of Project:** Agricultural Productivity and Risks in Northern Ghana  
**Mentor:** Professor Christopher Udry

**Description of the Project:**  
This project is the third-year evaluation of the impact of agricultural underinvestment in Northern Ghana. The goal of the project is to evaluate the impact of capital and rainfall insurance on farmers’ performance. One striking result found is that the demand for the rain insurance is high and that the insurance allows farmers to invest more in agriculture and take more risks. The specific part of the project I worked with was the third set of data corresponding to the third (and final) year of the project.

**Responsibilities:**  
I had different responsibilities throughout my SRO experience. As this project has been going on for at least three years, my first responsibility was to make sure that everything that should be completed was completed. That involved a lot of debugging Stata do-files. My second responsibility was to move the project forward. I wrote new do-files and ran some regressions to see the strength of the instruments of the project. My third responsibility was to learn how to program in ARCGIS and Python. For ARCGIS, I had to start from scratch: I had no experience before the summer. For Python, I used my experience with Java and have been making great progress. We used both ARCGIS and Python to get satellite NDVI (Normalized Difference Vegetation Index) data from the NASA website and transform it into Stata input, so that I can run some interesting regressions with the data we already have. Because my responsibilities were very different from each other, work was never a routine and it was always very exciting.

**Lessons learned:** By having such close contact with my mentor, I learnt a lot about the dynamics of the profession of academic economists. Economic research is a very dynamic field. As professor Udry told me, twenty years ago development economics was not as a strong field as it is nowadays. The most important lessons I learnt are: 1) How professors choose journals to submit their papers; 2) What are the incentives for professors to be referees for journals; 3) How the collaboration among professors in a same project works. 4) What economics PhD programs are looking for in undergraduate students.

**Opinion of SRO experience:** I feel that the SRO experience is mostly determined by the project’s mentor and the responsibilities that are given to the student. So, I want to take this moment to appreciate all the effort that professor Udry put into my SRO experience. Every time I asked him for suggestions on papers and books to read in development economics, he was always very excited to present them to me and to discuss what I had read. Every time (and believe me, those were many time) I asked about details of the profession, he was happy to answer all my questions. But most importantly, professor Udry understood that his project is very complex with many layers and I was new to it. Still, we made good progress over the summer and as I work during the academic year for one of Udry’s co-authors of the paper, professor Dean Karlan, I should keep working with the project until it is finished.

My experience with SRO was extremely positive and I would recommend it to students who have done research in the past and students who are new to the research field.