A Data-Driven Optimization of Economic Resource Allocation

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Even in the 21st century, poverty is a global epidemic. Although U.S. charities receive over 400 billion dollars annually, the allocation of these resources is catastrophically inefficient. In my experiment, I improve the metrics used to determine poverty levels using a novel data-based approach. A crowdfunding charity loan site, has recently published relevant data: where does the money from the loan go, how much of the loan gets paid back if anything at all, and various other details. By exploring this data programmatically and a variety of machine learning and data-exploration libraries, I am able to predict which regions are the most suitable for the charitable resources and what allocation of resources can provide the greatest economic gain. In the experiment, I draw correlations between the loans and the climate of a country and various other factors to predict which third world countries are being held back by financial reasons and what are those reasons.

Awards Won:
Third Award of $1,000