

# Predicting Global Life Expectancy

Daniel Gieseke and Seamus Walsh



# Overview

"The purpose of life is not to be happy. It is to be useful, to be honorable, to be compassionate, to have it make some difference that you have lived and lived well." - Ralph Waldo Emerson



# Data Analysis

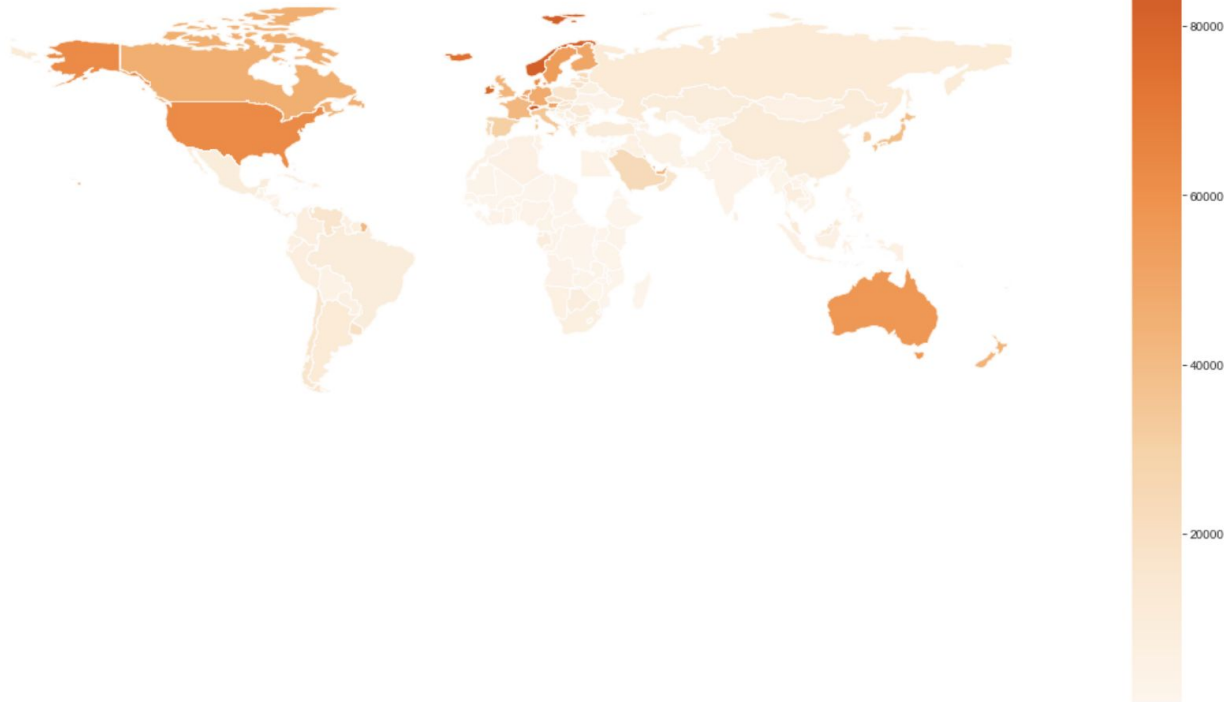
Our data sources:

- The World Bank
- United Nations
  - 173 Countries over 19 years

- Our model performs with 98% accuracy

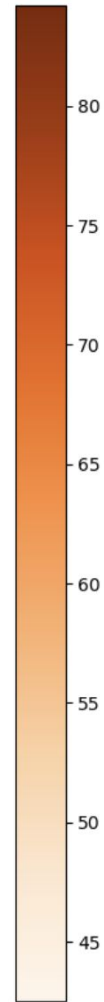
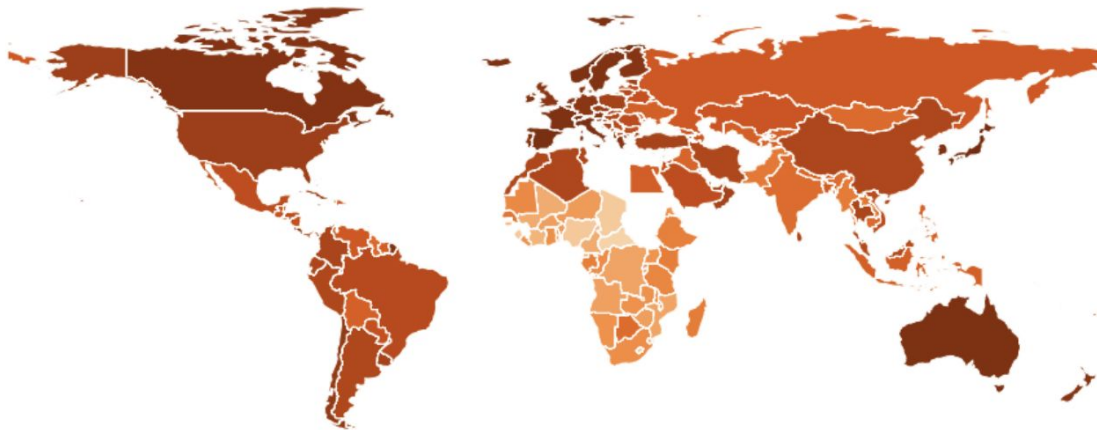


## GDP per Capita by Country

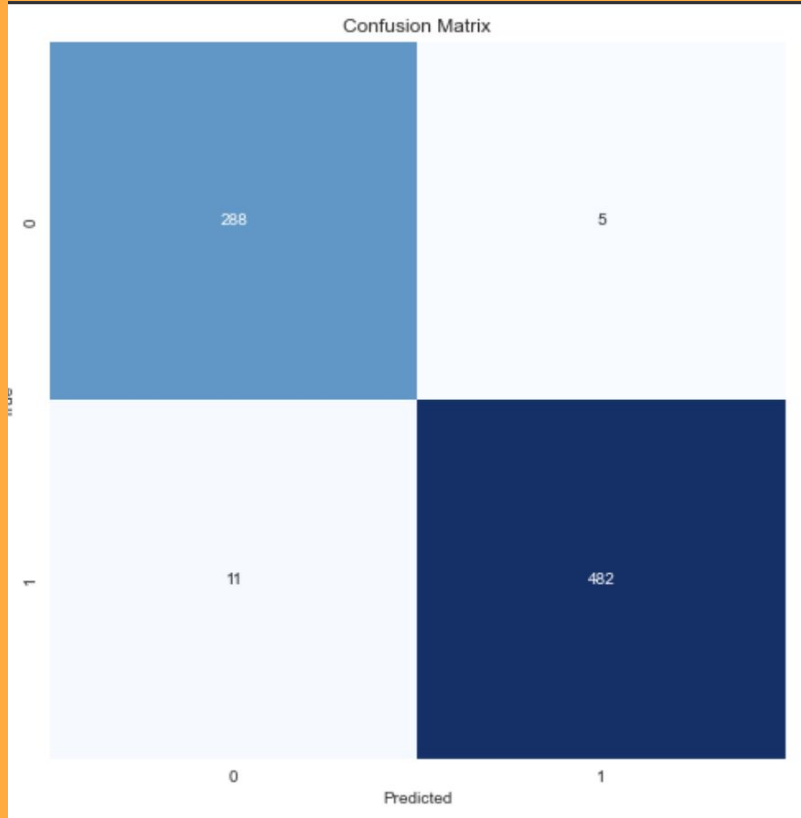


## Life Expectancy at Birth by Country

The map displays life expectancy at birth by country. The color scale ranges from 45 (light yellow) to 80 (dark red). High life expectancy (75-80 years) is prevalent in North America, Europe, and Australia. Moderate life expectancy (65-75 years) is seen in South America, Asia, and parts of Africa. Low life expectancy (45-60 years) is concentrated in sub-Saharan Africa and parts of South America and Asia.



# Model Accuracy and Feature Importance

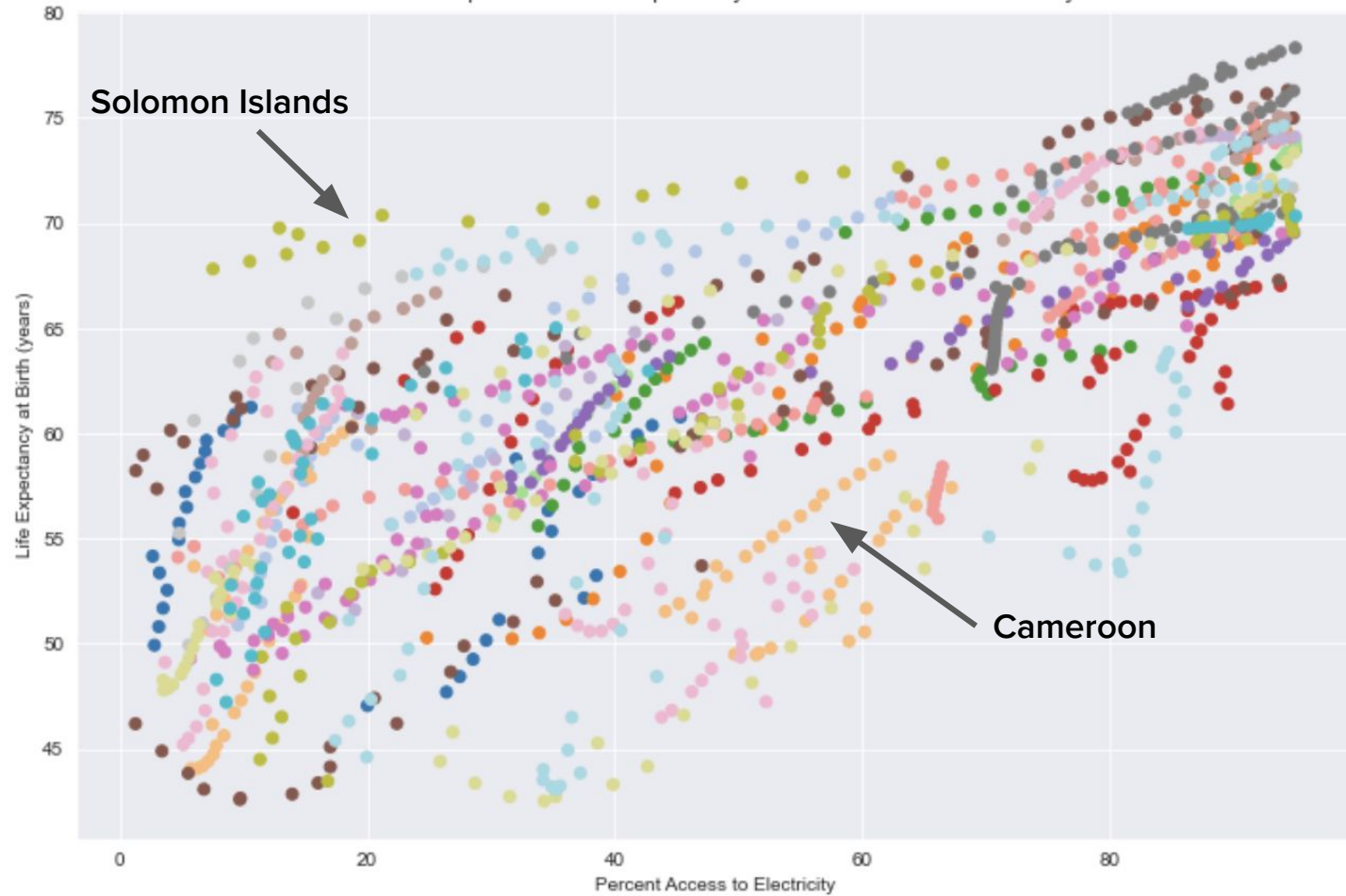


Access to Electricity: .23

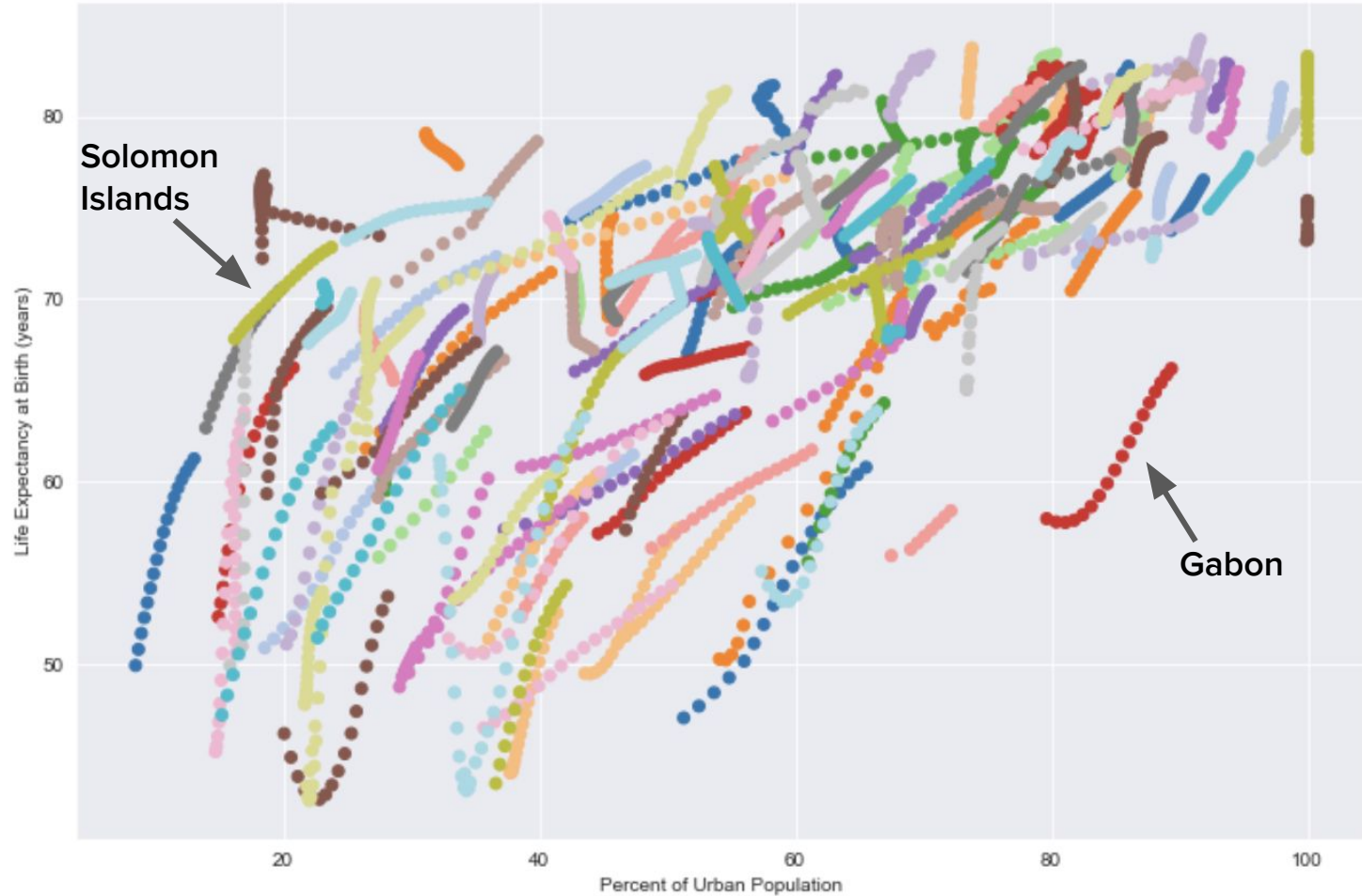
GDP Per Capita: .15

% Urban Population: .12

Relationship Between Life Expectancy at Birth and Access to Electricity



Relationship Between Life Expectancy at Birth and the Percent of a Population in Urban Areas





# Recommendations



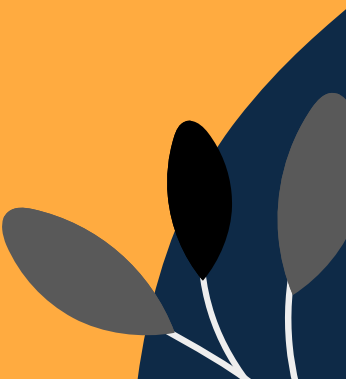
The background features a stylized landscape with two large orange hills. A dark blue river flows from the bottom center towards the right. Several white, fluffy clouds are scattered across the scene: one on the left hill, one on the right hill, and two at the bottom. In the top right corner, there are stylized leaves in dark blue and light blue.

**01** Invest in  
Electrical  
Infrastructure

**02** Develop Urban  
Hubs



# Future Work

- Get more granular (What are the specific, best ROI, interventions as they relate to our recommendations?)
  - Gather more data
  - Work with developing countries directly
- 



Questions?

