WATERPOINT FUNCTIONALITY PREDICTIVE ANALYSIS

Data Driven Decisions Inc

WATER CRISIS

- 4 million people in Tanzania lack access to water (UNICEF)
- Collect water from unsafe natural resources
- Pay high prices for access to water
- Walk 2 to 3km daily in search for water from public taps

DATA

- Aggregated data from the Tanzania Ministry of Water.
- 59,000

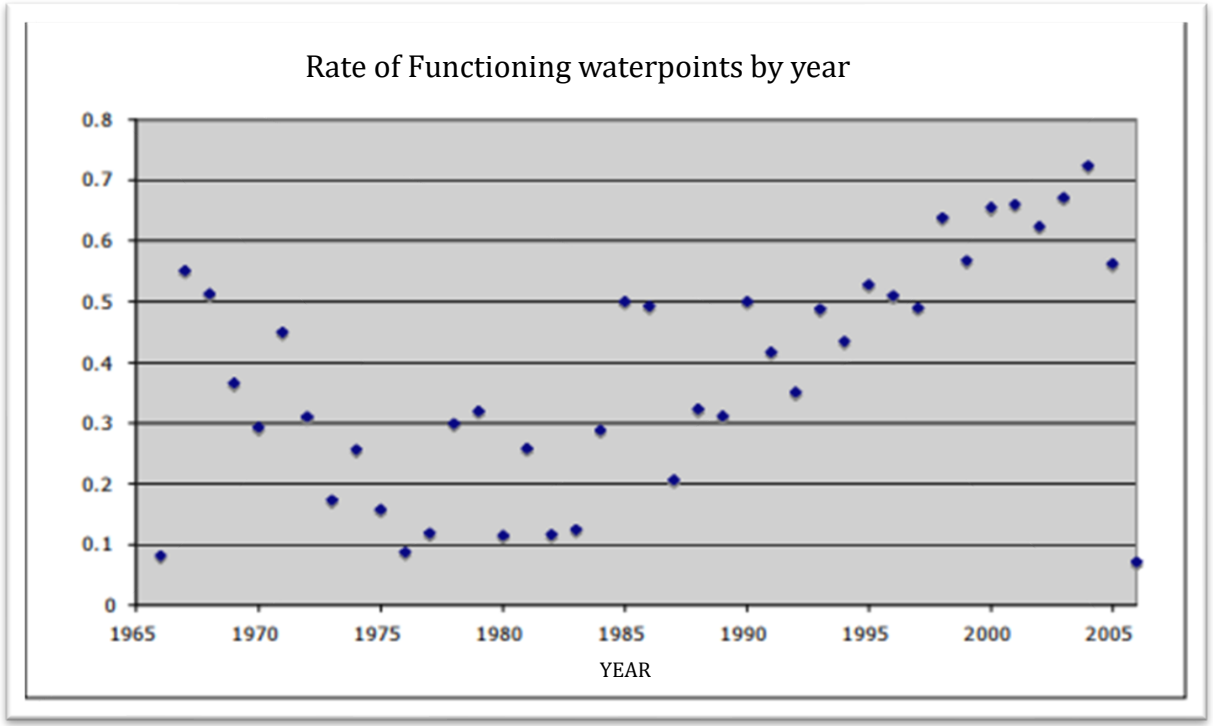
  Features include
- Geographic location, installer, population, water quality etc.

OPPORTUNITY

- High demand for water and sanitation products
- Opportunity to make an impact

CHALLENGES:

- Limited information about waterpoints condition



Limited waterpoint age data according to WAMMA

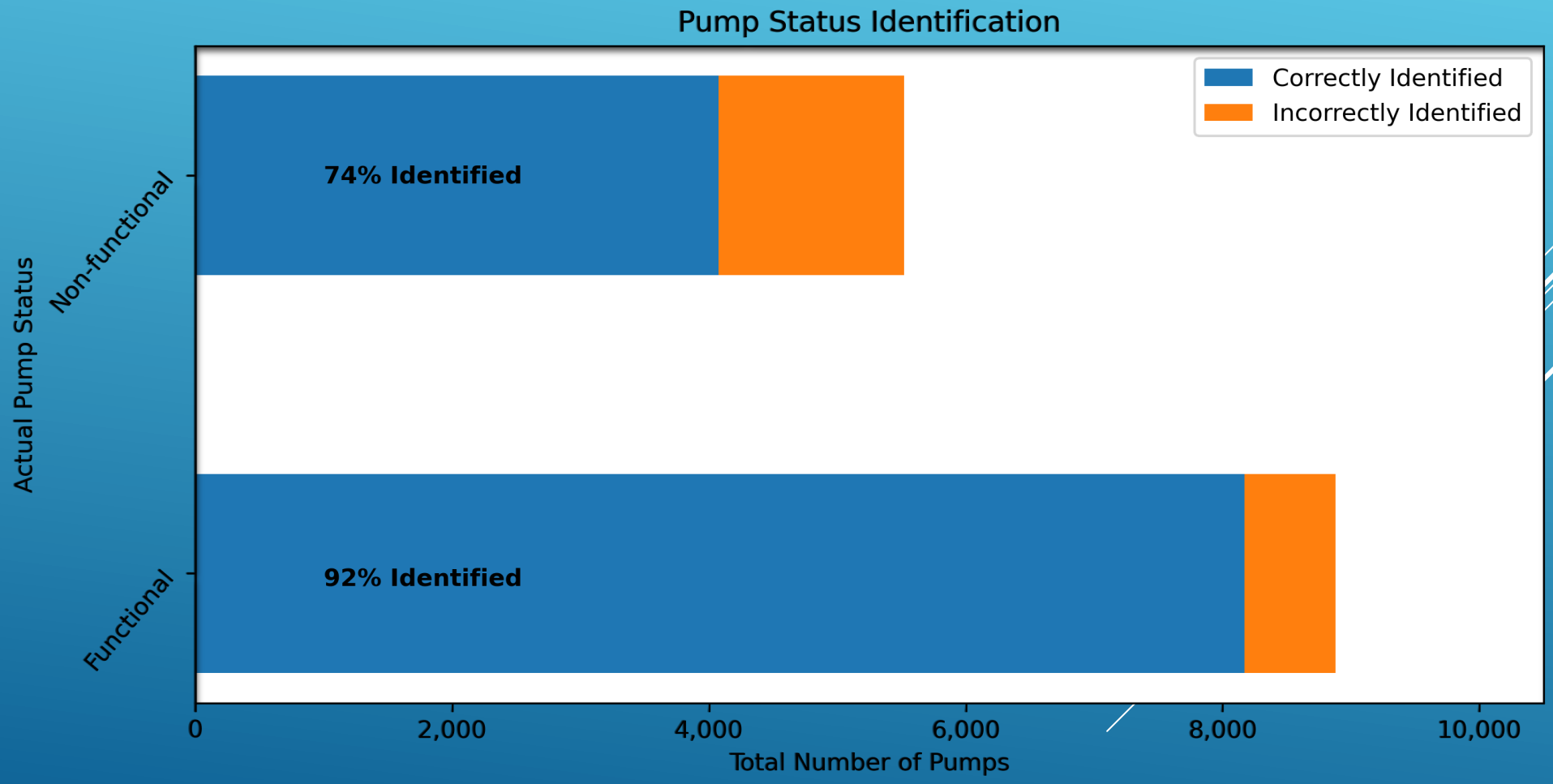
Analysis is based on other important features

Installers, Management Systems, Location

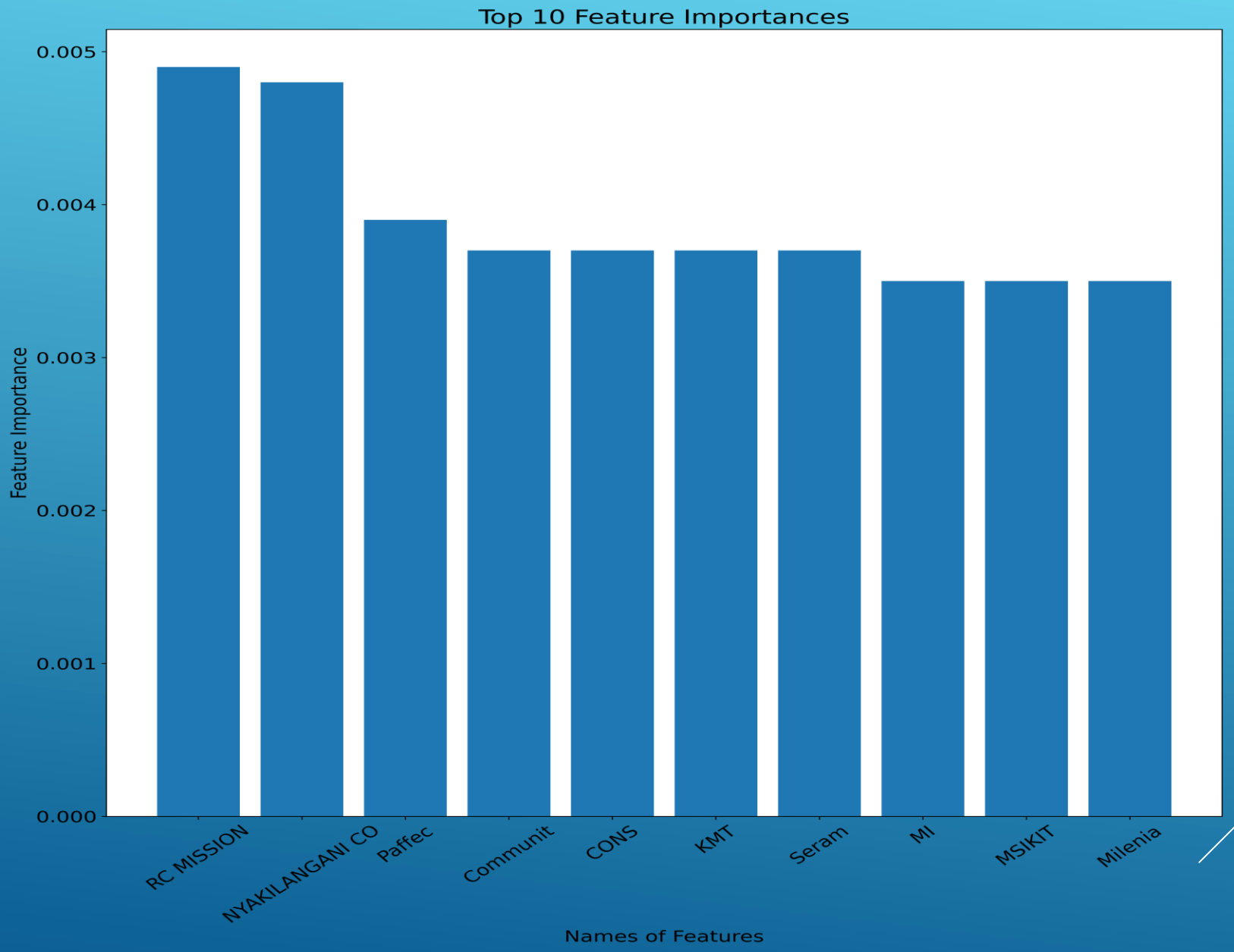
PREDICTION MODEL

Overall accuracy 85%

Tool that predicts functionality of water pumps



THE IMPLICATIONS OF INSTALLER



FUTURE STEPS

- Improve sensitivity to non-functional pumps
- Analyze regional trends
- Develop a multiclass model

CONTACT US

- Yuhkai Lin

  https://www.linkedin.com/in/yuhkai-lin-922304242/

  https://github.com/yuhkulele?tab=repositories

- Anton Smirnov

  antonalekssmirnov@gmail.com