Quenching Tanzania

Ensuring functional water wells for all

Water is **life**. Yet, for many in Tanzania, access to clean and functional water wells remains a daily struggle.

Tanzania’s Water Crisis

40 billion

In Sub-Saharan Africa, women and girls spend an estimated 40 billion hours a year collecting water.

16 million

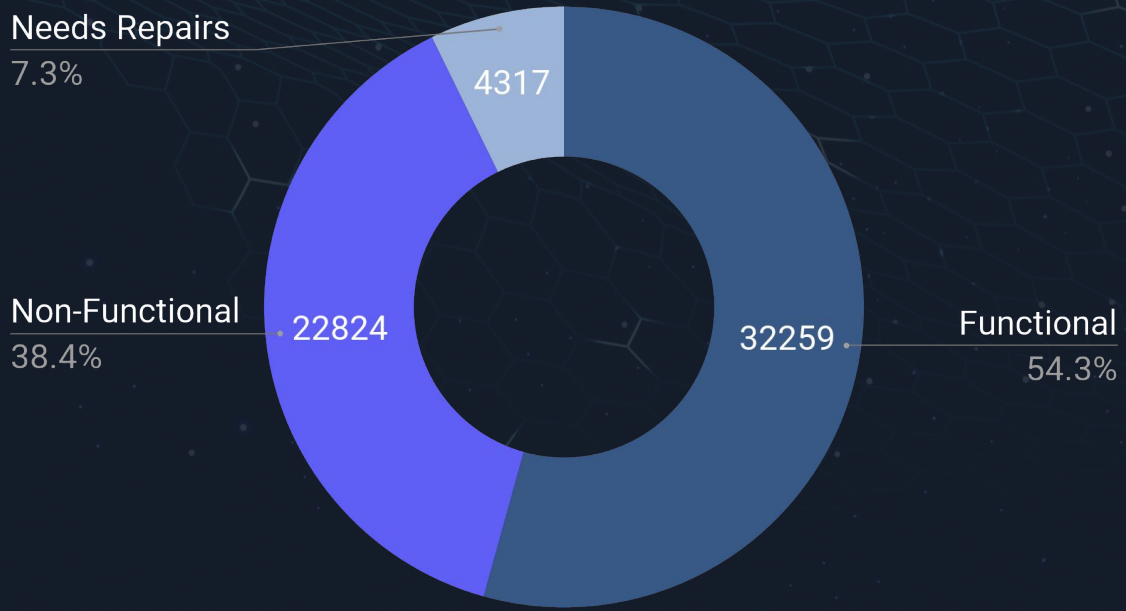
Out of its population of 59 million people, 16 million people (28%) lack access to safe water.

Objective

Bring you a model that predicts **well functionality** with utmost accuracy.

Data:

60,000 records of water wells in Tanzania



Process

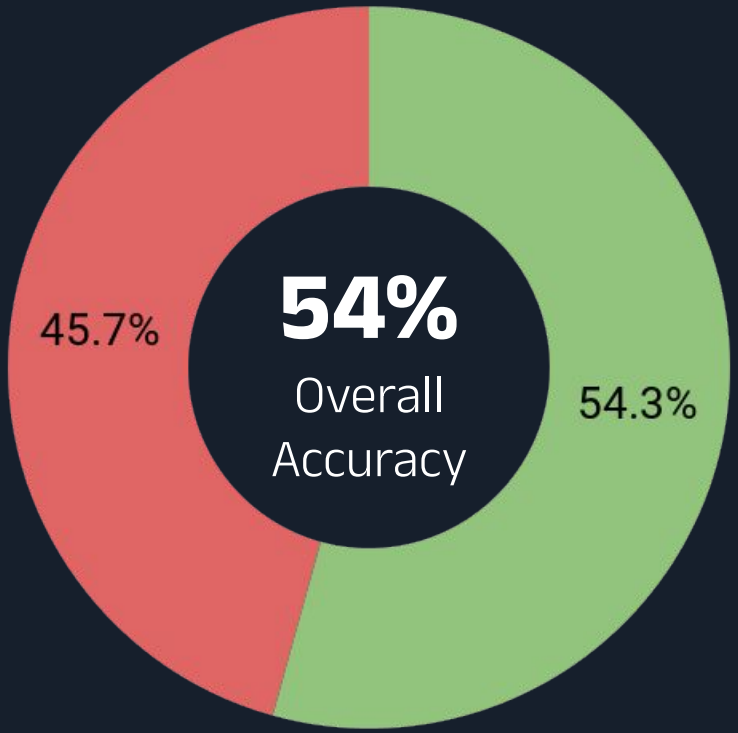
Clean
Data

More complex
Models

Baseline
Model

Evaluate
Results

Basewell Beacon

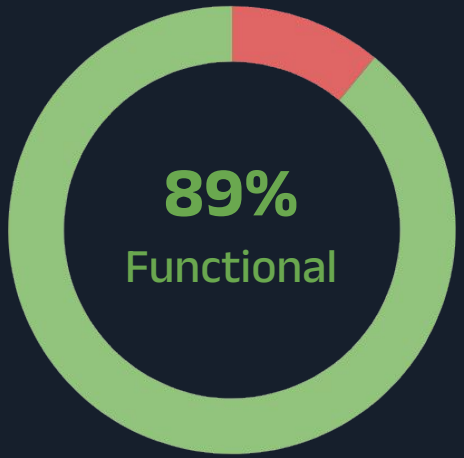


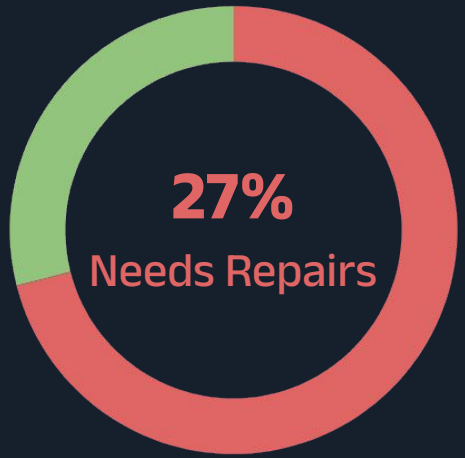
Functional: 100%
Needs Repairs: 0%
Non-Functional: 0%

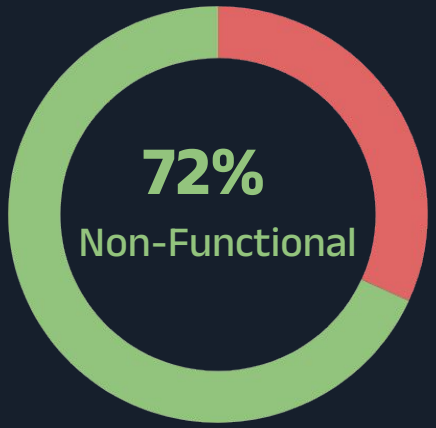
TriWell Predictor

77.8%

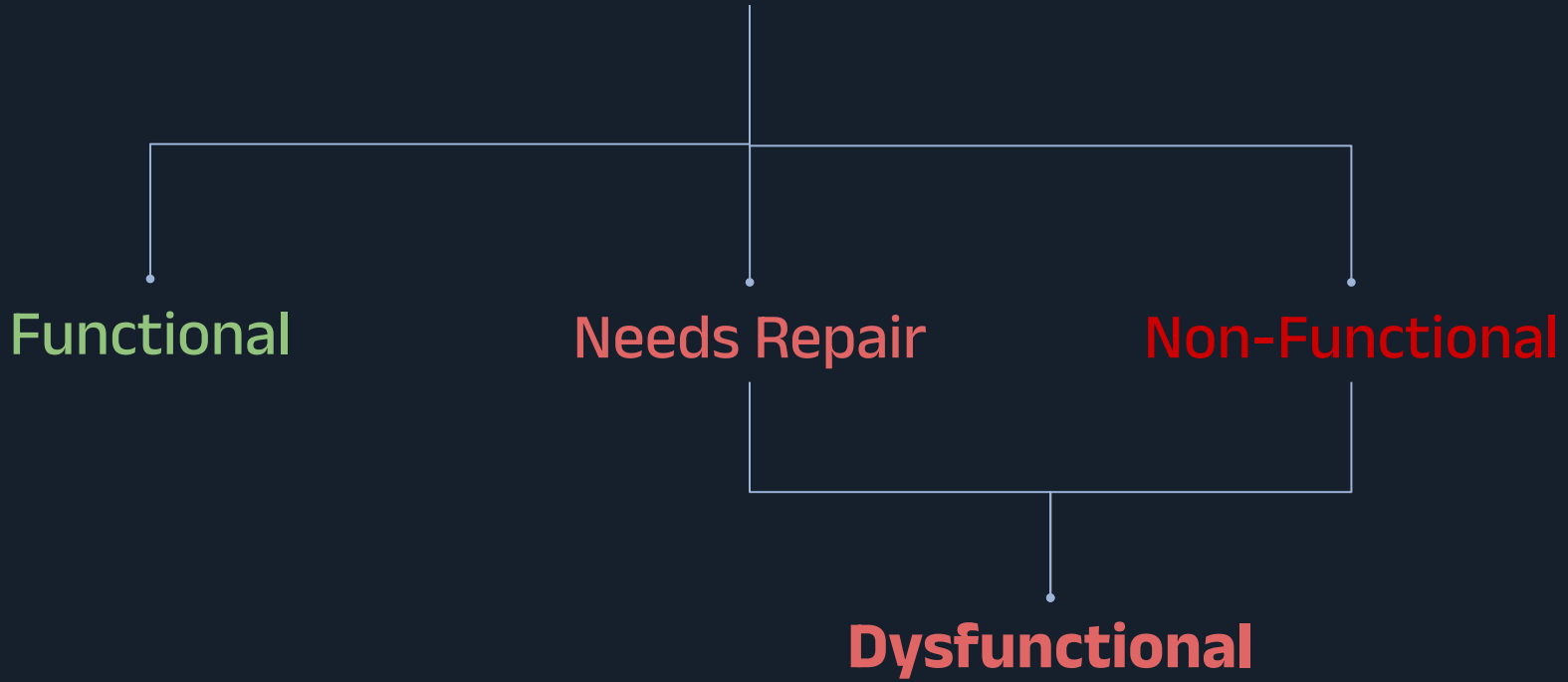
Overall Accuracy



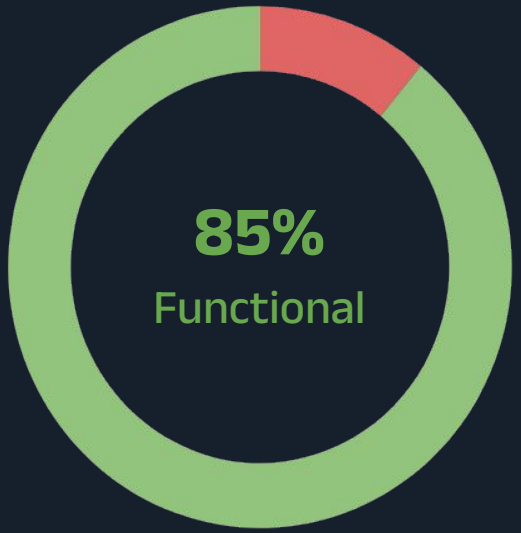


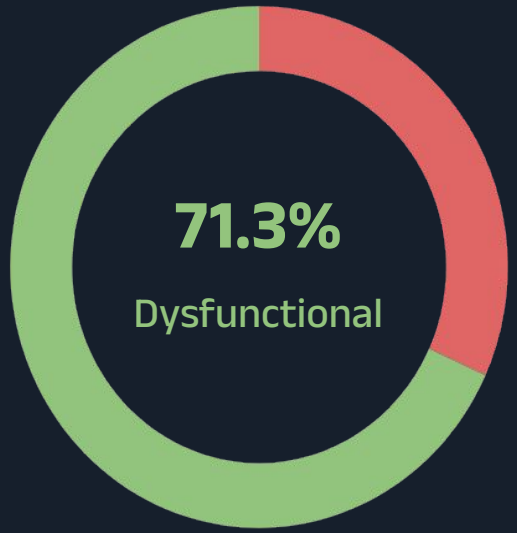


Previous data



AquaClassify Pro

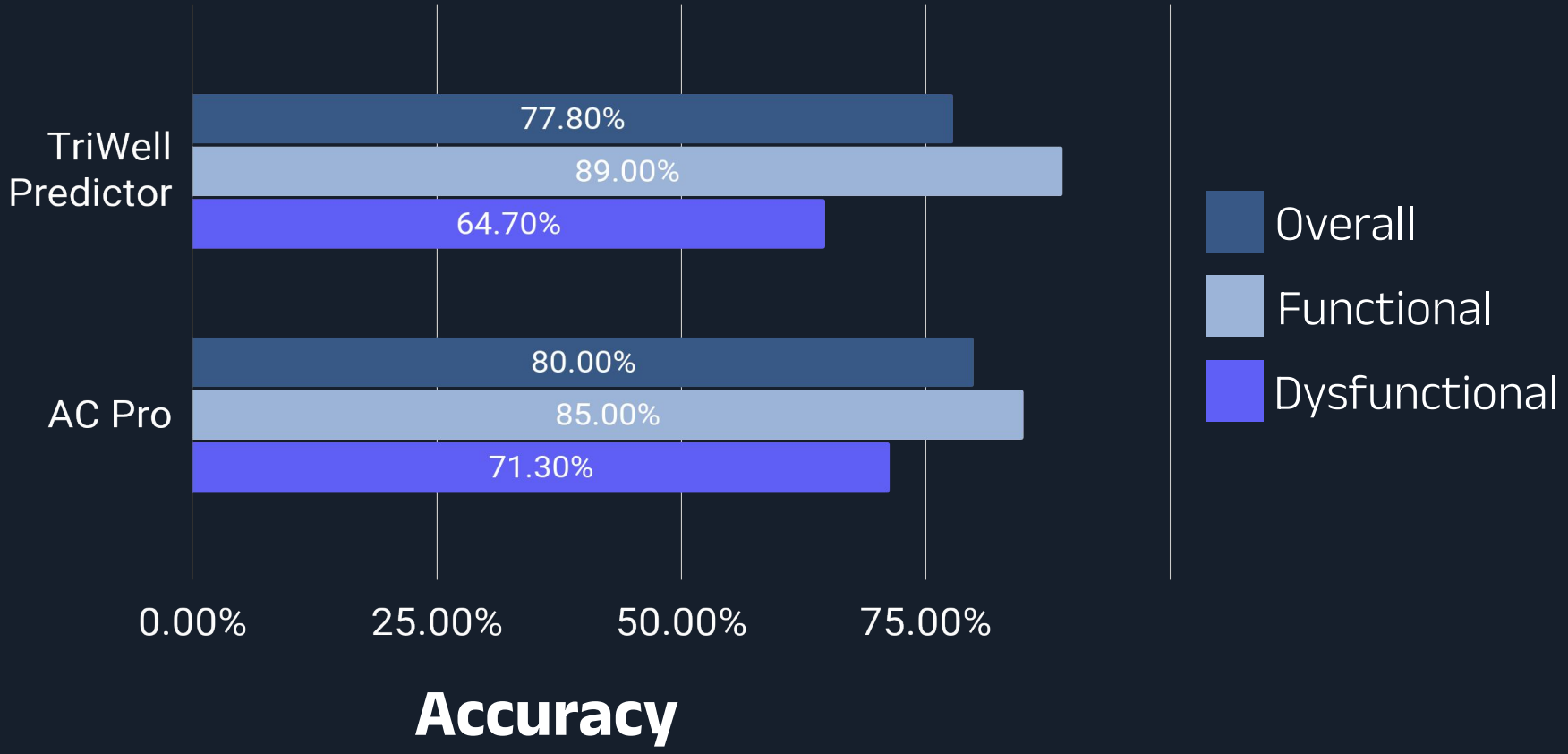




79.4%

Overall Accuracy

Model Comparison



Recommendations

	Overall Accuracy	Functional Accuracy	Dysfunctional Accuracy	Identifies “Needs Repair”
TriWell Predictor	77.8%	89%	64.7%	Yes
AquaClassify Pro	79.4%	85%	71.3%	No

Next Steps:

- Dive deeper into data to find more specific correlations.
- Use more advanced predictive modeling techniques to further maximize accuracy.

Thank You!

Heath Jones

Email: heefjones9@gmail.com

LinkedIn: https://www.linkedin.com/in/heefjones

Github: https://github.com/heefjones

Sources

Information:

- https://lifewater.org/water-crisis/
- https://water.org/our-impact/where-we-work/tanzania/

Photos:

- https://lifewater.org/blog/tanzania-water-crisis-facts/