

A satellite night view of Earth showing city lights and geographical features. A bright sun or moon is visible in the upper right corner, illuminating the horizon.

# SHAPING THE FUTURE OF MAPS

**TOMTOM** 

Feature Extraction Using Satellite Imagery

*Fuzail Palnak, Prakhar Verma, Ravi Panchani*

*“Predicting future isn’t magic, it’s Artificial Intelligence”*

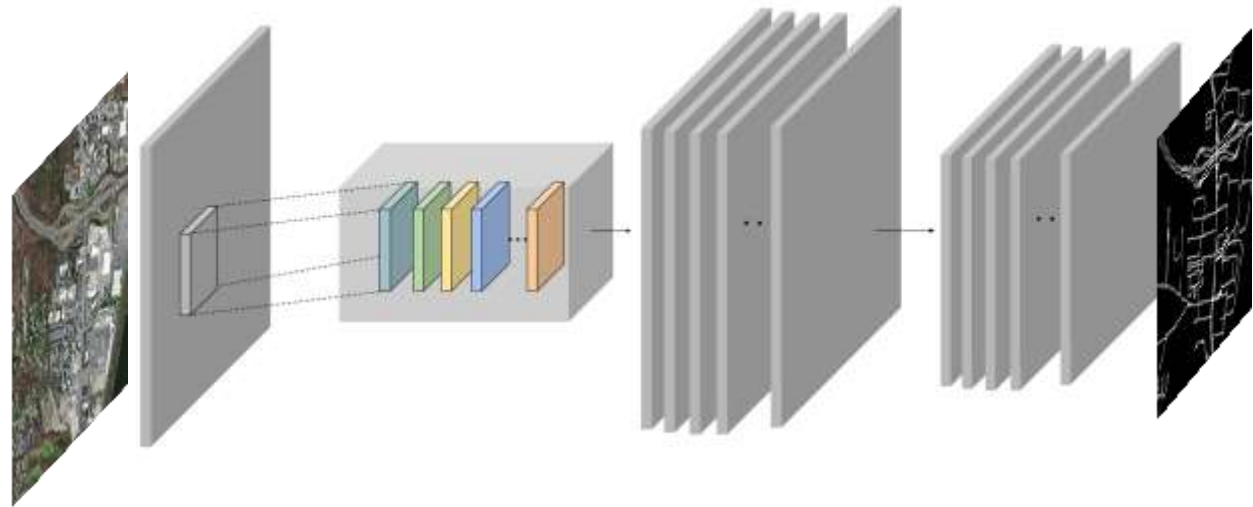
*- David Walters*

A satellite image of a landscape with a large, irregularly shaped water body in the center. The water is highlighted in a solid blue color, while the surrounding land is shown in shades of green and brown. The text "Intelligent Map Making" is overlaid in white on the blue water area.

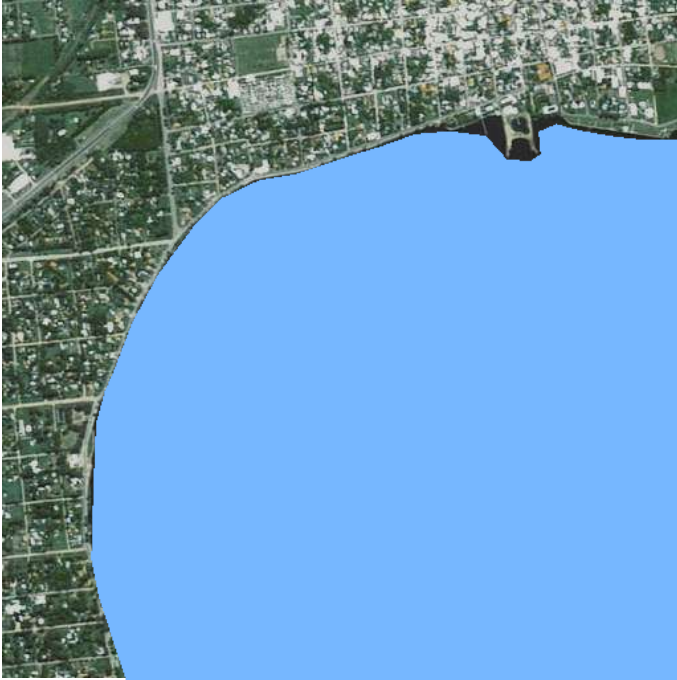
# Intelligent Map Making

# Feature Extraction

- Image Processing
- Semi Automatic Supervised Classification
- Machine Learning?
- Convolutional Neural Network
- Exploring Capsule & Adversarial Networks



# Extracted Features



Water Body



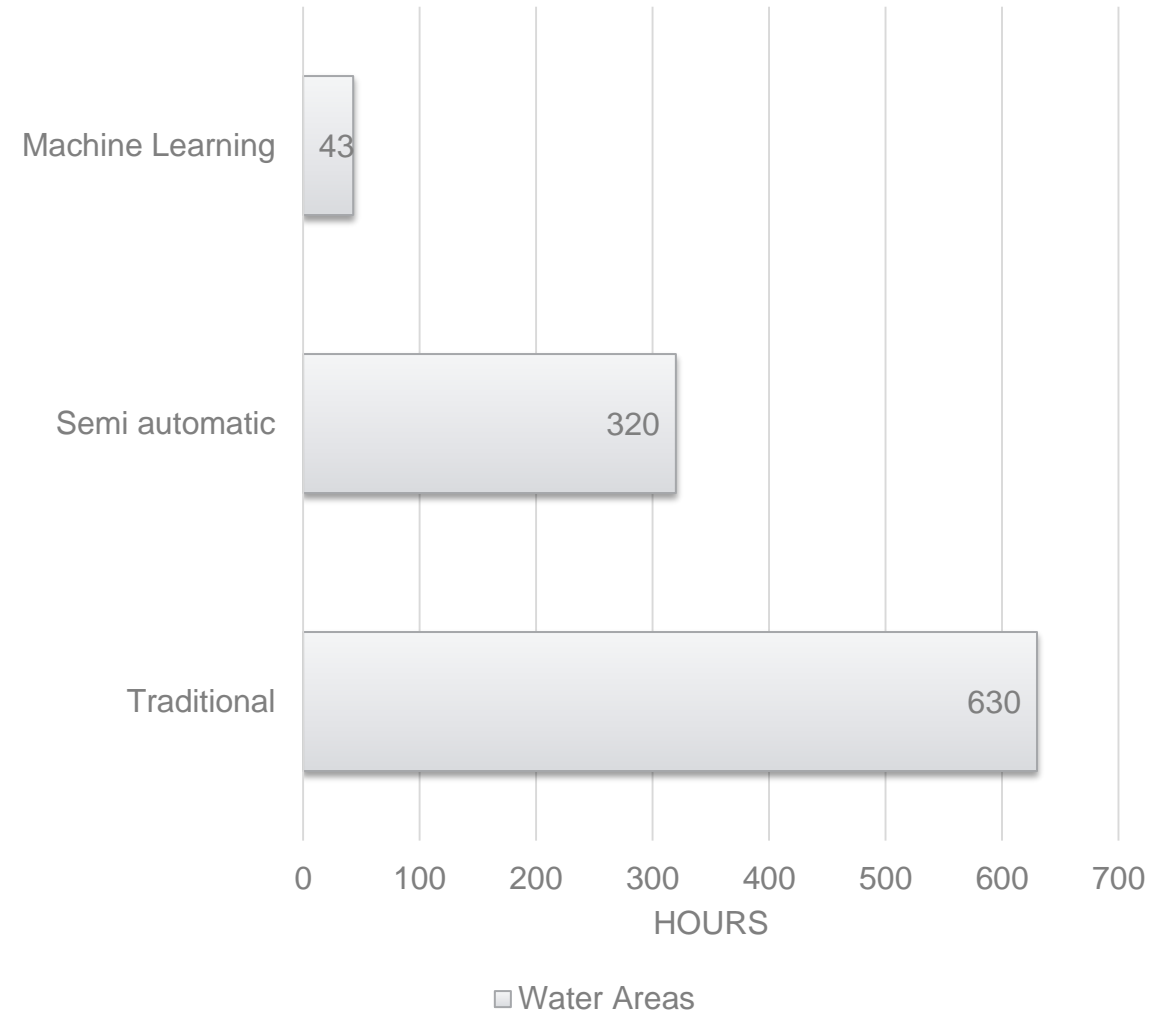
Road



Runway

# Case Study - Water

- Scope: Area - 1 million square meters
- Traditional map making technique
- Semi automatic supervised classification
- Machine Learning



# What's Next?



Automated



Cloud Based



Machine Learning Pipeline Framework

THANK YOU