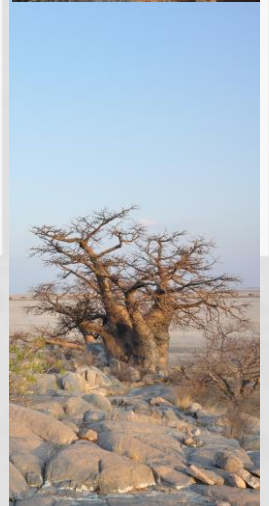


# TREE IDENTIFICATION AND CLASSIFICATION

MACHINE LEARNING MODEL

Sayuri Moodliar, PhD



# GOAL OF PROJECT

- To transform our identification and classification process from manual human to automated machine process
- Reduce the time and cost of identification and classification
- Reduce the error rate in identification and classification
- Build and implement a model that can be applied across multiple projects and clients

# METHODOLOGY

- Use benchmark classification techniques for identification
- Train and test the model using binary images and extracted features in respect of:
  - Crown (size, shape)
  - Bark (texture, colour)
  - Leaf (size, shape, margin, texture)

# OUTCOME

- Identify 200 species with a predetermined accuracy rate

# TIMELINES AND STEPS

- Data collection
- Data processing
- Create model
- Train model
- Test model
- Production test
- Review
- Implementation

# OTHER ISSUES

- Team
  - Consulting team
    - Primary contact person
  - Client
    - Who provides information?
- Information exchange and communication
  - Online submission process and tracking
- Project team meetings
- Deadline