Implementation Strategy

# **Preprocessing Engine**

* Dimensionality Reduction (Spatial)
* Transformation
* Amount Control (Train, Test, Validate)

# **CNN Implementation**

Block Architecture:

* ConvBlock Components:
  + Convolution Layer
  + Activation Layer
    - Saturating/Non-saturating (Batch Normalization)
  + Pooling Layer

# **Evolutionary ALgorithm**

* Swarm- Based (Yet to decide)
* Population Control
* Evolution Control
* Generational Response

# **Distributed System**

Master-slave Architecture:

* Master: Exploration, deployment, logging and regression
* Slave: Train, test, validate, evaluate CNN and respond

# **Front-End**

Basic HTML, Bootstrap Webpage Using Flask.