Artificial Intelligence and Machine Learning for Business, Industry and Society

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Vice Chancellor/CEO

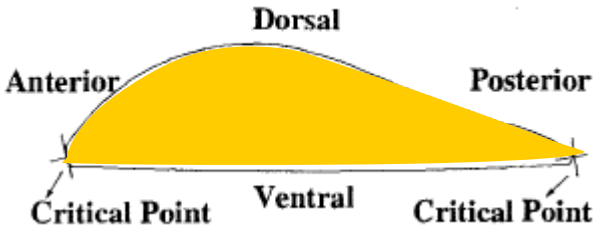
SLIIT

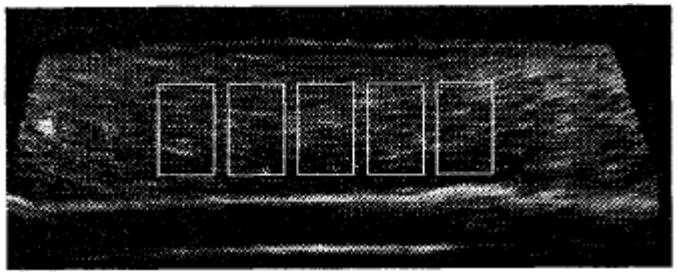
CA
THE INSTITUTE OF CHARTERED ACCOUNTANTS OF SRI LANKA

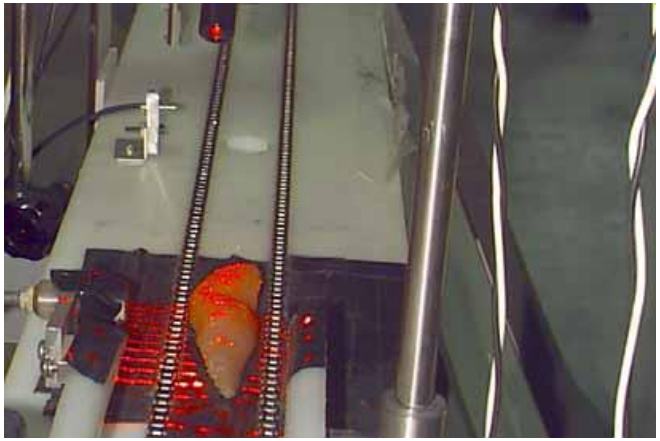
HYPERLEAP
39th National Conference of Chartered Accountants

Fish Processing

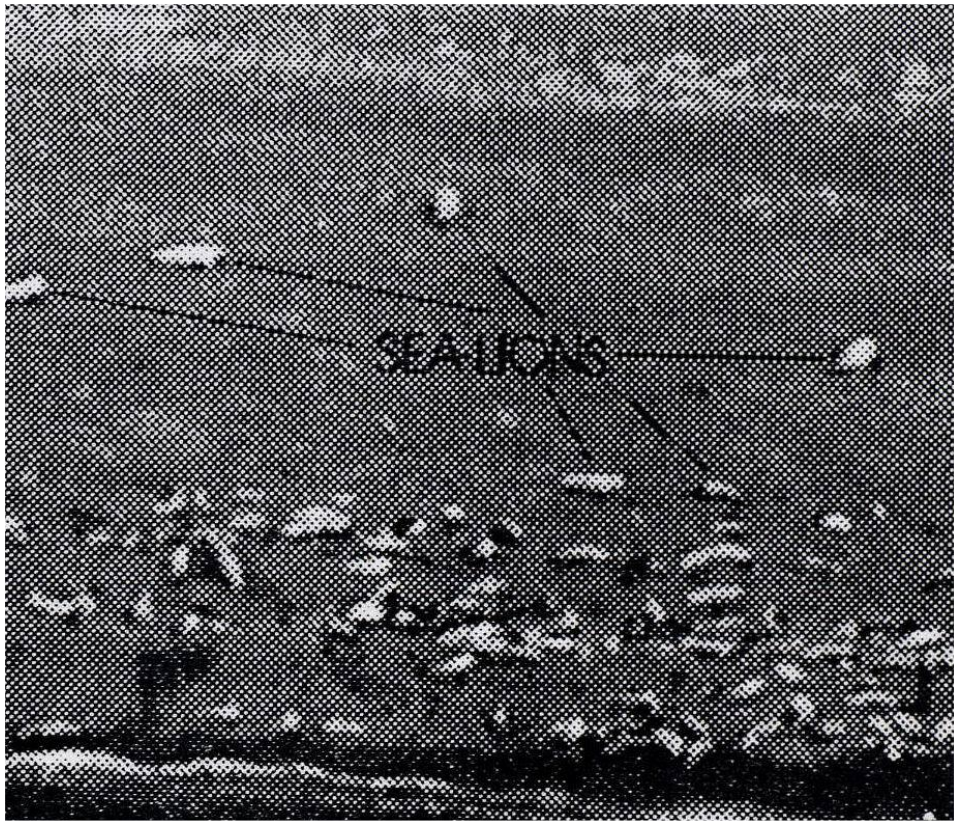
Herring Roe Grading

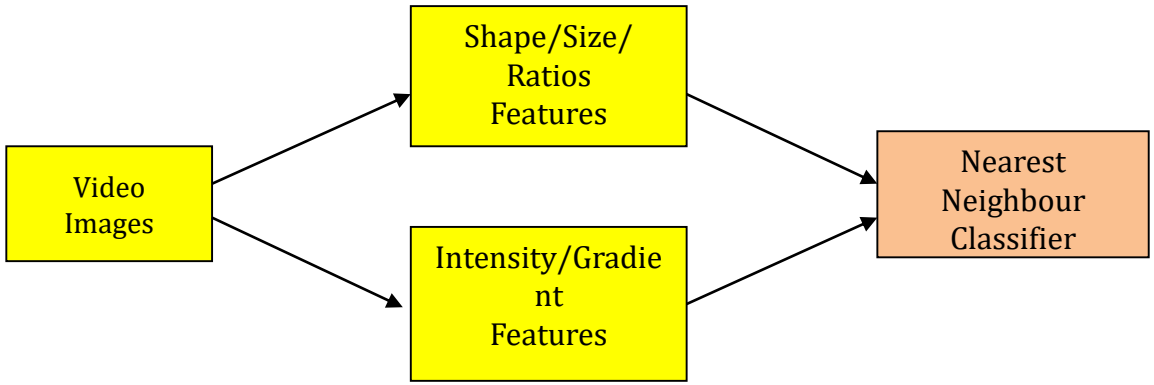




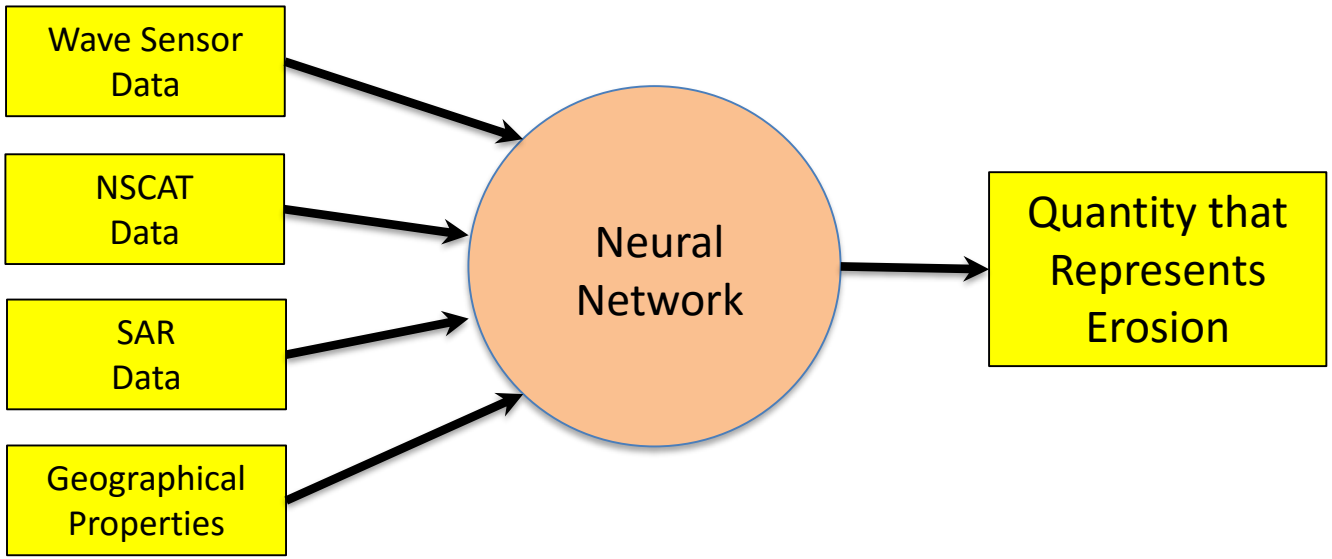


Sea Lions


SEA LIONS

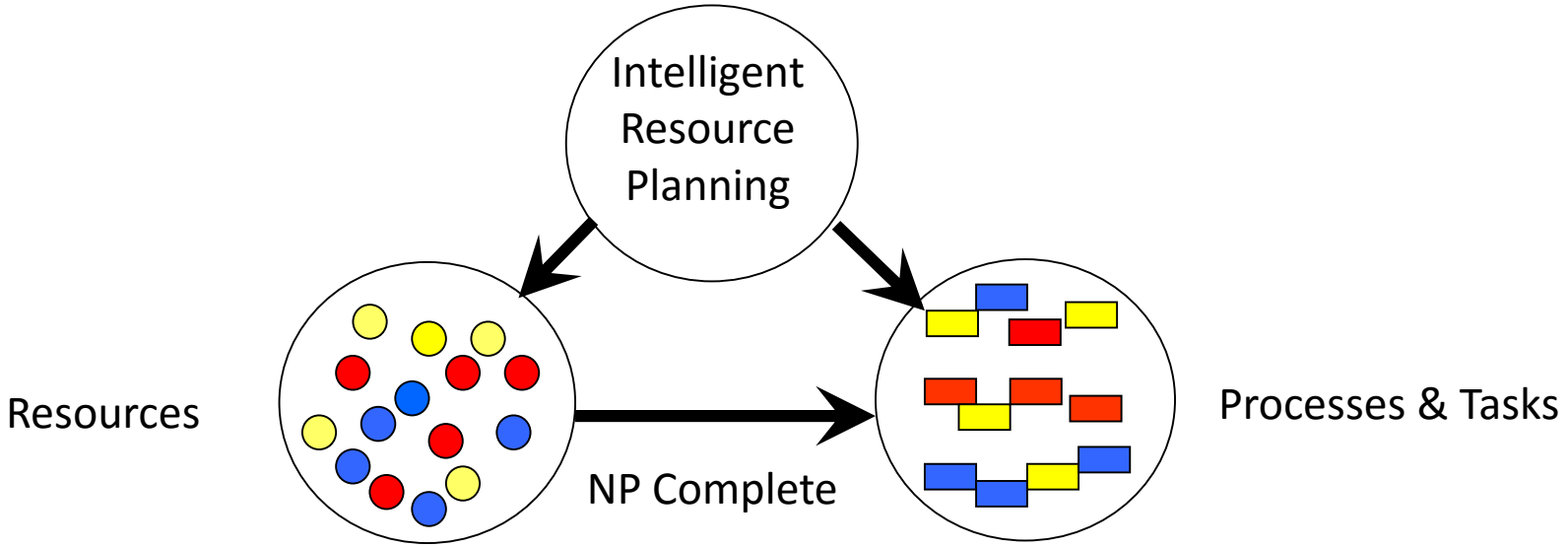

Video Images
Shape/Size/ Ratios Features
Intensity/Gradie nt Features
Nearest Neighbour Classifier

Coastal Erosion

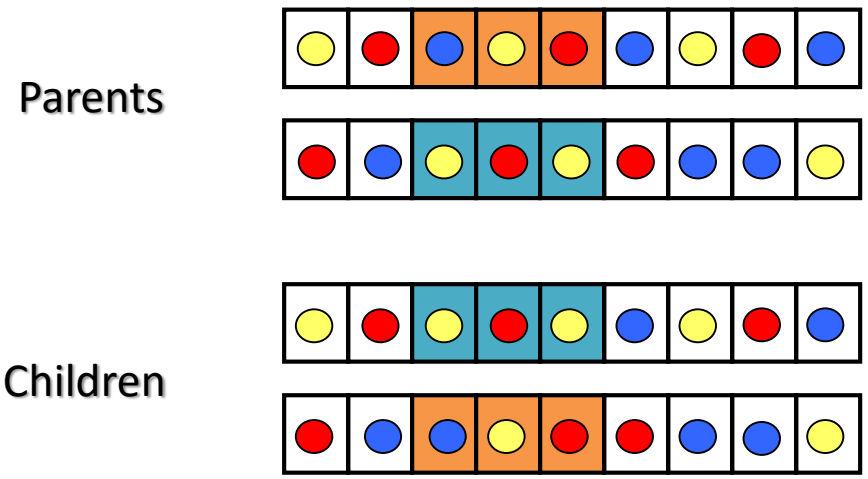


Agriculture

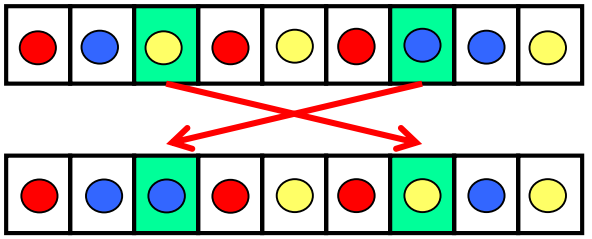
Evolutionary Systems



Crossover



Mutation

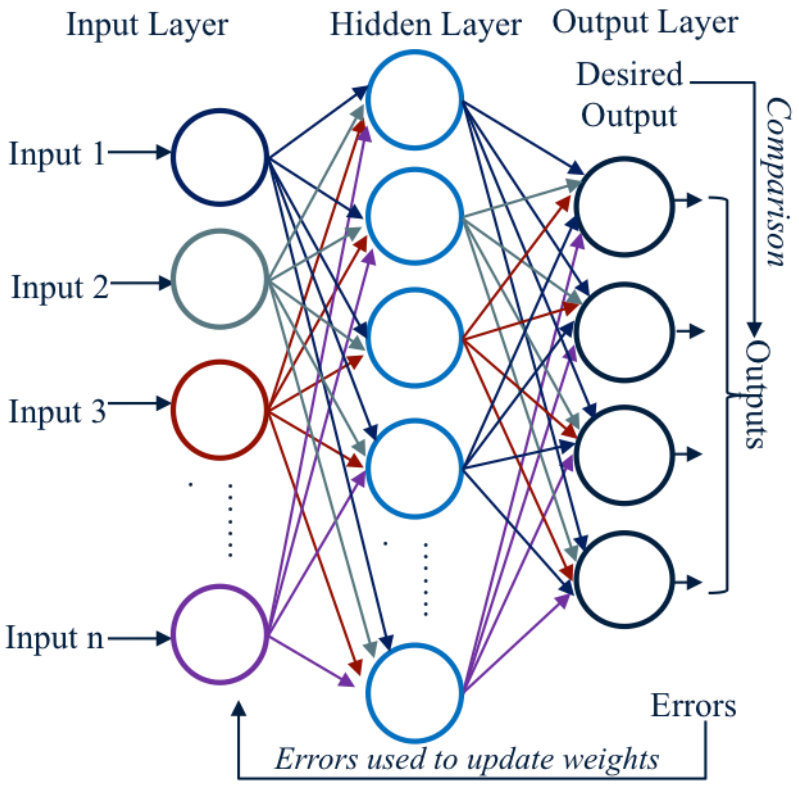


Best is evaluated by the fitness function

Robotics

Sleep Apnea

- Obstructive Sleep Apnea
- Central Sleep Apnea
- Hypopnea
- No Apneic Event



Neural Network Architecture

Early Detection of Cancer

Biomarker	Molecules expressed by particular tumours identified
Nanosensors	Nanotechnology based biosensor developed to detect low concentrations of marker molecules
Screening	High risk patient population groups identified
Trials	Clinical trials conducted among patients to assess risk

Stock Market Index Predictior

Non-linear, non-stationary, High volatility

Fundamental Analysis

- macroeconomic factors
- management strategies of the company
- sensitivity to political environment

Technical Analysis

- historical price trends

Textual Analysis

- data extracted from breaking news stories on the web to capture market sentiments