Tschinux

Trump Selection (acc: 65%)

Strategy:

- Deep Neural Network
- Used 'keras tuner' to find model

Data:

- Merged all Files
  - Filters (std: 0.8, mean: 0.5, games: 0.9)
- Removed duplicates
- Checked for line consistency
- Features: cards
- Label: trump

Neural Network:

- Network Definition
  - Input Layer: Dense with activation function relu and Input shape: 36
  - 7 Hidden Layers: Dense with activation function relu
    - 42 → 69 → 64 → 35 → 35 → 18 → 29
  - Output Layer: Dense with activation function softmax Shape: 7
- Optimazer: stochastic gradient descent
- Loss Function: categorical crossentropy
- Epochs: 100, Batch Size: 256
- Time to train: ~1h

Play Card (acc: 67%)

Strategy:

- Deep Neural Network
- Hidden layer neuron count based on sqrt(m*n) and (m*n)/2 (m for input layers, n for output layers)

Data:

- Merged all Files
- Removed duplicates
- Checked for line consistency
- Features: cards + ticks + player + trump
- Label: card

Neural Network:

- Network Definition
  - Input Layer: Dense with activation function relu and Input shape: 36
  - 4 Hidden Layers: Dense with activation function relu
    - 82 → 59 → 55 → 36
  - Output Layer: Dense with activation function softmax Shape: 36
- Optimazer: stochastic gradient descent
- Loss Function: categorical crossentropy
- Epochs: 100, Batch Size: 300
- Time to train: ~5h

DL4G – HS19 – Steve Ineichen & Remo Schwarzentruber

Hosted by: amazon web services™

G Unit