A green sign with white text

Description automatically generated

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(36, activation=’relu’, input\_shape=[36])
  + 7 Hidden Layers
    - Dense(42, activation=’relu’)
    - Dense(69, activation=’relu’)
    - Dense(64, activation=’relu’)
    - Dense(35, activation=’relu’)
    - Dense(35, activation=’relu’)
    - Dense(18, activation=’relu’)
    - Dense(29, activation=’relu’)
  + Output Layer: Dense(7, activation=’softmax’)
* Optimazer: stochastic gradient descent
* Loss Function: categorical crossentropy
* Epochs: 100, Batch Size: 256

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(36, activation=’relu’, input\_shape=[36])
  + 7 Hidden Layers
    - Dense(82, activation=’relu’)
    - Dense(59, activation=’relu’)
    - Dense(55, activation=’relu’)
    - Dense(36, activation=’relu’)
  + Output Layer: Dense(36, activation=’softmax’)
* Optimazer: stochastic gradient descent
* Loss Function: categorical crossentropy
* Epochs: 100, Batch Size: 300

Play cards

Data:

Neural Network:

Image result for g-unit logo