# **Machine Learning Repository**

Center for Machine Learning and Intelligent Systems

**View ALL Data Sets** 

## **Poker Hand Data Set**

Download: Data Folder, Data Set Description

Abstract: Purpose is to predict poker hands



Data Set Characteristics:	Multivariate	Number of Instances:	1025010	Area:	Game
Attribute Characteristics:	Categorical, Integer	Number of Attributes:	11	Date Donated	2007-01- 01
Associated Tasks:	Classification	Missing Values?	No	Number of Web Hits:	350770

#### Source:

Creators:

Robert Cattral (cattral '@' gmail.com)

Franz Oppacher (oppacher '@' scs.carleton.ca)
Carleton University, Department of Computer Science
Intelligent Systems Research Unit
1125 Colonel By Drive, Ottawa, Ontario, Canada, K1S5B6

### **Data Set Information:**

Each record is an example of a hand consisting of five playing cards drawn from a standard deck of 52. Each card is described using two attributes (suit and rank), for a total of 10 predictive attributes. There is one Class attribute that describes the "Poker Hand". The order of cards is important, which is why there are 480 possible Royal Flush hands as compared to 4 (one for each suit - explained in [Web Link]).

#### **Attribute Information:**

1) S1 "Suit of card #1"
Ordinal (1-4) representing {Hearts, Spades, Diamonds, Clubs}

2) C1 "Rank of card #1" Numerical (1-13) representing (Ace, 2, 3, ..., Queen, King)

3) S2 "Suit of card #2" Ordinal (1-4) representing {Hearts, Spades, Diamonds, Clubs}

4) C2 "Rank of card #2" Numerical (1-13) representing (Ace, 2, 3, ..., Queen, King)

5) S3 "Suit of card #3"
Ordinal (1-4) representing {Hearts, Spades, Diamonds, Clubs}

6) C3 "Rank of card #3" Numerical (1-13) representing (Ace, 2, 3, ..., Queen, King)

7) S4 "Suit of card #4"
Ordinal (1-4) representing {Hearts, Spades, Diamonds, Clubs}

8) C4 "Rank of card #4" Numerical (1-13) representing (Ace, 2, 3, ..., Queen, King)

9) S5 "Suit of card #5"
Ordinal (1-4) representing {Hearts, Spades, Diamonds, Clubs}

10) C5 "Rank of card 5" Numerical (1-13) representing (Ace, 2, 3,  $\dots$  , Queen, King)

11) CLASS "Poker Hand" Ordinal (0-9)

0: Nothing in hand; not a recognized poker hand

- 1: One pair; one pair of equal ranks within five cards
- 2: Two pairs; two pairs of equal ranks within five cards
- 3: Three of a kind; three equal ranks within five cards
- 4: Straight; five cards, sequentially ranked with no gaps
- 5: Flush; five cards with the same suit
- 6: Full house; pair + different rank three of a kind
- 7: Four of a kind; four equal ranks within five cards
- 8: Straight flush; straight + flush
- 9: Royal flush; {Ace, King, Queen, Jack, Ten} + flush

### **Relevant Papers:**

R. Cattral, F. Oppacher, D. Deugo. Evolutionary Data Mining with Automatic Rule Generalization. Recent Advances in Computers, Computing and Communications, pp.296-300, WSEAS Press, 2002.

Note: This was a slightly different dataset that had more classes, and was considerably more difficult.

### **Citation Request:**

Please refer to the Machine Learning Repository's citation policy



In Collaboration With:



About | Citation Policy | Donation Policy | Contact | CML