Machine Learning Projekt: Netflix

Einleitung

Hauptteil

Projektmanagement

Projektziele

Wirtschaftsinformatische Aspekte

Datenanalyse

Daten Exploration

```r
dim(netflix_titles)
```

```
## [1] 6234    12
```

```r
head(netflix_titles)
```

```
##    show_id    type                                title
## 1 81145628   Movie Norm of the North: King Sized Adventure
## 2 80117401   Movie              Jandino: Whatever it Takes
## 3 70234439 TV Show                     Transformers Prime
## 4 80058654 TV Show         Transformers: Robots in Disguise
## 5 80125979   Movie                          #realityhigh
## 6 80163890 TV Show                               Apaches
##               director
## 1 Richard Finn, Tim Maltby
## 2                 <NA>
## 3                 <NA>
## 4                 <NA>
## 5        Fernando Lebrija
## 6                 <NA>
##
## 1                                          Alan Marriott, Andrew Toth, Brian Dobson, Cole Howard, Jenni
## 2
## 3 Peter Cullen, Sumalee Montano, Frank Welker, Jeffrey Combs, Kevin Michael Richardson, Tania Gunadi
## 4                                         Will Friedle, Darren Criss, Constance Zim
## 5       Nesta Cooper, Kate Walsh, John Michael Higgins, Keith Powers, Alicia Sanz, Jake Borelli,
## 6
##                          country      date_added release_year
## 1 United States, India, South Korea, China September 9, 2019         2019
## 2                    United Kingdom September 9, 2016         2016
## 3                     United States September 8, 2018         2013
## 4                     United States September 8, 2018         2016
## 5                     United States September 8, 2017         2017
## 6                             Spain September 8, 2017         2016
```

```
##      rating duration
## 1    TV-PG   90 min
## 2    TV-MA   94 min
## 3 TV-Y7-FV 1 Season
## 4    TV-Y7 1 Season
## 5    TV-14   99 min
## 6    TV-MA 1 Season
##                                                                 listed_in
## 1                                  Children & Family Movies, Comedies
## 2                                                     Stand-Up Comedy
## 3                                                            Kids' TV
## 4                                                            Kids' TV
## 5                                                            Comedies
## 6 Crime TV Shows, International TV Shows, Spanish-Language TV Shows
##
## 1          Before planning an awesome wedding for his grandfather, a polar bear king must take back a
## 2     Jandino Asporaat riffs on the challenges of raising kids and serenades the audience with a rousi
## 3          With the help of three human allies, the Autobots once again protect Earth from the onslaug
## 4                       When a prison ship crash unleashes hundreds of Decepticons on Earth, Bumblebe
## 5 When nerdy high schooler Dani finally attracts the interest of her longtime crush, she lands in the
## 6              A young journalist is forced into a life of crime to save his father and family in this
```

```
tail(netflix_titles)
```

```
##         show_id    type                                          title director
## 6229 80159925 TV Show                                        Kikoriki     <NA>
## 6230 80000063 TV Show                                    Red vs. Blue     <NA>
## 6231 70286564 TV Show                                           Maron     <NA>
## 6232 80116008   Movie      Little Baby Bum: Nursery Rhyme Friends       <NA>
## 6233 70281022 TV Show A Young Doctor's Notebook and Other Stories       <NA>
## 6234 70153404 TV Show                                         Friends     <NA>
##
## 6229
## 6230 Burnie Burns, Jason Saldaña, Gustavo Sorola, Geoff Lazer Ramsey, Joel Heyman, Matt Hullum, Dan
## 6231                                                                           Marc Maron, Ju
## 6232
## 6233            Daniel Radcliffe, Jon Hamm, Adam Godley, Christopher Godwin, Rosie Cavaliero, Vic
## 6234                                              Jennifer Aniston, Courteney Cox, Lisa
##             country date_added release_year rating   duration
## 6229           <NA>       <NA>         2010   TV-Y  2 Seasons
## 6230  United States       <NA>         2015     NR 13 Seasons
## 6231  United States       <NA>         2016  TV-MA  4 Seasons
## 6232           <NA>       <NA>         2016   <NA>     60 min
## 6233 United Kingdom       <NA>         2013  TV-MA  2 Seasons
## 6234  United States       <NA>         2003  TV-14 10 Seasons
##                                                   listed_in
## 6229                                               Kids' TV
## 6230 TV Action & Adventure, TV Comedies, TV Sci-Fi & Fantasy
## 6231                                             TV Comedies
## 6232                                                  Movies
## 6233              British TV Shows, TV Comedies, TV Dramas
## 6234                          Classic & Cult TV, TV Comedies
##
## 6229     A wacky rabbit and his gang of animal pals have fun solving problems, sharing stories and e
## 6230   This parody of first-person shooter games, military life and science-fiction films centers on
```

```
## 6231 Marc Maron stars as Marc Maron, who interviews fellow comedians for his popular podcast, only t
## 6232     Nursery rhymes and original music for children accompanied by bright, playful animation enga
## 6233     Set during the Russian Revolution, this comic miniseries is based on a doctor's memories of
## 6234      This hit sitcom follows the merry misadventures of six 20-something pals as they navigate
```

```r
summary(netflix_titles)
```

```
##     show_id            type               title            director
##  Min.   :   247747   Length:6234        Length:6234        Length:6234
##  1st Qu.:80035802   Class :character   Class :character   Class :character
##  Median :80163367   Mode  :character   Mode  :character   Mode  :character
##  Mean   :76703679
##  3rd Qu.:80244889
##  Max.   :81235729
##     cast             country           date_added         release_year
##  Length:6234        Length:6234        Length:6234        Min.   :1925
##  Class :character   Class :character   Class :character   1st Qu.:2013
##  Mode  :character   Mode  :character   Mode  :character   Median :2016
##                                                           Mean   :2013
##                                                           3rd Qu.:2018
##                                                           Max.   :2020
##     rating            duration          listed_in         description
##  Length:6234        Length:6234        Length:6234        Length:6234
##  Class :character   Class :character   Class :character   Class :character
##  Mode  :character   Mode  :character   Mode  :character   Mode  :character
##
##
##
```

Machine Learning Algorithmen

Ergebnisse

Fazit