**A Corpus of Truthful and Deceptive Hotel Reviews**

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**Dataset Description**

The dataset is a collection of truthful and deceptive reviews for 20 hotels in Chicago. It is taken from Kaggle, posted by Rachel Tatman [1]. The dataset contains five (5) different columns namely;

1. *Deceptive*: Classifies whether the review is truthful or deceptive.
2. *Hotel:* The column that contains the name of the hotel given the reviews.
3. *Polarity:* Classifies whether the sentiments are positive or negative.
4. *Source:* Contains the source of information.
5. *Text Review:* The actual review posted for the particular hotel.

Hence, A total of 1600 data is present and 80% will be used for training while the other 20% will later be used for testing. Thus, for this project the proponents uses the ‘Text Review’ as the only feature to classify whether it is truthful and deceptive.

**Frequency Matrix**

|  |  |  |
| --- | --- | --- |
|  | **TRUTHFUL** | **DECEPTIVE** |
| **1** | 49 | 15 |
| **$2** | 9 | 0 |
| **4** | 69 | 14 |
| **6** | 30 | 13 |
| **10** | 37 | 15 |
| **12** | 9 | 1 |
| **13** | 6 | 3 |
| **15** | 29 | 15 |
| **20** | 27 | 9 |
| **30** | 27 | 17 |
| **$100** | 9 | 1 |
| **3rd** | 11 | 0 |
| **5th** | 8 | 1 |
| **a** | 613 | 586 |
| **able** | 41 | 49 |
| **absolutely** | 25 | 37 |
| **accommodating** | 7 | 12 |
| **accommodations** | 4 | 40 |
| **across** | 24 | 12 |
| **acted** | 2 | 8 |
| **advance** | 12 | 6 |
| **advantage** | 4 | 13 |
| **affinia** | 14 | 29 |
| **after** | 143 | 148 |
| **again** | 174 | 181 |
| **against** | 7 | 3 |
| **allegro** | 21 | 16 |
| **allow** | 7 | 11 |
| **almost** | 36 | 27 |
| **along** | 16 | 19 |
| **also** | 140 | 119 |
| **am** | 72 | 48 |
| **amazed** | 1 | 8 |
| **amenities** | 32 | 59 |
| **amenity** | 2 | 7 |
| **amount** | 6 | 12 |
| **anniversary** | 7 | 27 |
| **another** | 71 | 59 |
| **answer** | 8 | 3 |
| **appetizers** | 6 | 3 |
| **appointed** | 20 | 7 |
| **aquarium** | 3 | 7 |
| **areas** | 17 | 12 |
| **arrived** | 73 | 80 |
| **as** | 230 | 242 |
| **ask** | 20 | 25 |
| **asked** | 74 | 55 |
| **atmosphere** | 10 | 36 |
| **attend** | 3 | 7 |
| **attended** | 9 | 2 |
| **attractions** | 9 | 26 |
| **available** | 39 | 51 |
| **aveda** | 10 | 2 |
| **average** | 19 | 15 |
| **bad** | 55 | 43 |
| **bag** | 6 | 3 |
| **bags** | 13 | 23 |
| **bargain** | 7 | 2 |
| **based** | 15 | 5 |
| **basically** | 11 | 6 |
| **bath** | 18 | 11 |
| **bathrooms** | 27 | 10 |
| **be** | 266 | 278 |
| **beat** | 13 | 6 |
| **beautiful** | 54 | 87 |
| **because** | 104 | 93 |
| **before** | 76 | 66 |
| **bellhop** | 3 | 6 |
| **below** | 18 | 2 |
| **better** | 94 | 77 |
| **between** | 19 | 9 |
| **big** | 44 | 37 |
| **bill** | 21 | 8 |
| **bit** | 50 | 32 |
| **blanket** | 7 | 2 |
| **block** | 25 | 2 |
| **blocks** | 31 | 4 |
| **bother** | 10 | 7 |
| **bottles** | 11 | 1 |
| **bottom** | 9 | 3 |
| **boutique** | 15 | 4 |
| **bowl** | 8 | 3 |
| **breakfast** | 93 | 57 |
| **breath** | 1 | 11 |
| **brick** | 8 | 2 |
| **bright** | 7 | 2 |
| **broken** | 25 | 9 |
| **brought** | 20 | 23 |
| **brown** | 6 | 3 |
| **bug** | 6 | 3 |
| **built** | 6 | 3 |
| **but** | 371 | 254 |
| **c** | 10 | 7 |
| **call** | 65 | 27 |
| **called** | 97 | 52 |
| **calling** | 13 | 4 |
| **calls** | 17 | 9 |
| **ceiling** | 7 | 2 |
| **celebrate** | 1 | 8 |
| **centre** | 8 | 1 |
| **chair** | 17 | 3 |
| **charge** | 47 | 14 |
| **charges** | 15 | 3 |
| **charging** | 10 | 0 |
| **charm** | 12 | 5 |
| **cheaper** | 7 | 2 |
| **checkout** | 14 | 5 |
| **children** | 6 | 13 |
| **choose** | 21 | 13 |
| **chosen** | 7 | 3 |
| **cigarette** | 1 | 11 |
| **city** | 62 | 110 |
| **classy** | 3 | 17 |
| **cleaned** | 14 | 32 |
| **cleaning** | 10 | 24 |
| **cleanliness** | 3 | 15 |
| **close** | 65 | 53 |
| **closed** | 11 | 6 |
| **closer** | 8 | 1 |
| **closet** | 25 | 4 |
| **clothes** | 7 | 2 |
| **cocktails** | 6 | 3 |
| **com** | 8 | 1 |
| **complaint** | 15 | 4 |
| **complaints** | 10 | 7 |
| **concern** | 6 | 3 |
| **concierge** | 59 | 33 |
| **confirm** | 7 | 2 |
| **confirmed** | 9 | 2 |
| **connection** | 3 | 7 |
| **conrad** | 13 | 31 |
| **consider** | 8 | 2 |
| **continue** | 7 | 2 |
| **conveniently** | 6 | 14 |
| **correct** | 12 | 5 |
| **costs** | 9 | 3 |
| **couch** | 8 | 2 |
| **could** | 140 | 135 |
| **couldn** | 38 | 51 |
| **course** | 20 | 9 |
| **courteous** | 10 | 16 |
| **cover** | 8 | 2 |
| **covered** | 17 | 2 |
| **cramped** | 9 | 1 |
| **credit** | 19 | 9 |
| **cup** | 10 | 1 |
| **currently** | 8 | 1 |
| **cut** | 8 | 1 |
| **daily** | 8 | 3 |
| **dark** | 22 | 7 |
| **dated** | 15 | 2 |
| **daughter** | 13 | 6 |
| **deal** | 40 | 22 |
| **decent** | 22 | 14 |
| **decided** | 27 | 62 |
| **delicious** | 5 | 32 |
| **delight** | 3 | 7 |
| **delivered** | 18 | 10 |
| **deluxe** | 5 | 12 |
| **desk** | 157 | 133 |
| **despite** | 21 | 15 |
| **didn** | 94 | 88 |
| **didnt** | 11 | 6 |
| **die** | 1 | 11 |
| **difficult** | 18 | 9 |
| **dining** | 11 | 34 |
| **dinner** | 30 | 43 |
| **discover** | 7 | 2 |
| **distance** | 37 | 25 |
| **doesn** | 14 | 6 |
| **dog** | 9 | 18 |
| **dollars** | 13 | 5 |
| **don** | 69 | 39 |
| **door** | 89 | 50 |
| **doorman** | 15 | 2 |
| **doormen** | 18 | 2 |
| **doors** | 22 | 12 |
| **down** | 99 | 73 |
| **drive** | 12 | 6 |
| **e** | 11 | 1 |
| **each** | 34 | 28 |
| **earlier** | 10 | 7 |
| **ease** | 2 | 9 |
| **east** | 21 | 31 |
| **efficient** | 7 | 3 |
| **el** | 10 | 0 |
| **elegant** | 16 | 37 |
| **elevator** | 46 | 8 |
| **elevators** | 40 | 4 |
| **else** | 27 | 34 |
| **ended** | 19 | 16 |
| **enjoy** | 15 | 30 |
| **enjoyable** | 3 | 14 |
| **enjoyed** | 31 | 67 |
| **enough** | 45 | 38 |
| **entered** | 6 | 14 |
| **entire** | 24 | 20 |
| **entrance** | 11 | 6 |
| **even** | 162 | 142 |
| **evening** | 31 | 14 |
| **everyone** | 24 | 31 |
| **everything** | 64 | 85 |
| **exactly** | 7 | 10 |
| **excellent** | 60 | 50 |
| **exercise** | 3 | 6 |
| **expecting** | 11 | 16 |
| **expensive** | 34 | 18 |
| **extremely** | 42 | 48 |
| **eye** | 3 | 6 |
| **facing** | 9 | 0 |
| **fair** | 8 | 3 |
| **famous** | 3 | 7 |
| **feeling** | 11 | 15 |
| **fi** | 11 | 17 |
| **finally** | 45 | 75 |
| **flight** | 7 | 13 |
| **floors** | 24 | 2 |
| **flowers** | 8 | 1 |
| **following** | 8 | 1 |
| **food** | 49 | 104 |
| **forget** | 3 | 8 |
| **forward** | 15 | 28 |
| **four** | 31 | 21 |
| **friend** | 11 | 17 |
| **from** | 286 | 254 |
| **front** | 132 | 114 |
| **fruit** | 9 | 2 |
| **full** | 40 | 24 |
| **fun** | 18 | 27 |
| **funky** | 8 | 1 |
| **furnishings** | 7 | 11 |
| **furniture** | 24 | 20 |
| **given** | 40 | 31 |
| **giving** | 8 | 2 |
| **gold** | 13 | 6 |
| **got** | 127 | 96 |
| **grand** | 1 | 11 |
| **great** | 241 | 197 |
| **group** | 12 | 7 |
| **guests** | 52 | 40 |
| **hall** | 14 | 6 |
| **happen** | 7 | 2 |
| **hardly** | 3 | 8 |
| **hassle** | 3 | 6 |
| **hate** | 2 | 7 |
| **he** | 60 | 50 |
| **headed** | 3 | 8 |
| **hear** | 41 | 12 |
| **heart** | 7 | 28 |
| **heat** | 7 | 2 |
| **helped** | 8 | 18 |
| **helping** | 2 | 7 |
| **high** | 48 | 53 |
| **hilton** | 44 | 56 |
| **his** | 27 | 17 |
| **historic** | 13 | 5 |
| **hold** | 14 | 4 |
| **home** | 34 | 65 |
| **homewood** | 5 | 29 |
| **honeymoon** | 3 | 7 |
| **honor** | 11 | 0 |
| **hopes** | 2 | 7 |
| **hotwire** | 10 | 0 |
| **hour** | 50 | 60 |
| **housekeeping** | 37 | 17 |
| **i** | 492 | 581 |
| **ice** | 14 | 3 |
| **impossible** | 9 | 3 |
| **including** | 25 | 11 |
| **incredible** | 7 | 13 |
| **incredibly** | 17 | 9 |
| **indoor** | 3 | 25 |
| **inside** | 14 | 20 |
| **instead** | 28 | 15 |
| **is** | 418 | 359 |
| **issues** | 18 | 8 |
| **it** | 464 | 448 |
| **itself** | 27 | 35 |
| **james** | 25 | 18 |
| **john** | 10 |  |
| **june** | 9 | 1 |
| **kids** | 11 | 24 |
| **king** | 53 | 46 |
| **known** | 2 | 7 |
| **l** | 14 | 3 |
| **laptop** | 3 | 9 |
| **large** | 62 | 28 |
| **lcd** | 3 | 6 |
| **leaving** | 15 | 11 |
| **left** | 54 | 45 |
| **leg** | 3 | 6 |
| **leisure** | 6 | 3 |
| **letter** | 8 | 3 |
| **life** | 8 | 21 |
| **light** | 18 | 9 |
| **lighting** | 7 | 3 |
| **line** | 50 | 12 |
| **little** | 64 | 35 |
| **live** | 17 | 12 |
| **lobby** | 131 | 75 |
| **local** | 4 | 16 |
| **located** | 40 | 58 |
| **location** | 231 | 104 |
| **locations** | 7 | 3 |
| **locked** | 7 | 2 |
| **lockwood** | 3 | 7 |
| **long** | 48 | 63 |
| **looked** | 43 | 48 |
| **looking** | 51 | 87 |
| **lost** | 18 | 10 |
| **lots** | 23 | 11 |
| **loud** | 18 | 16 |
| **loved** | 41 | 47 |
| **low** | 21 | 5 |
| **lower** | 9 | 2 |
| **lunch** | 7 | 3 |
| **luxurious** | 8 | 54 |
| **luxury** | 7 | 66 |
| **maid** | 11 | 17 |
| **main** | 26 | 10 |
| **maintenance** | 12 | 6 |
| **major** | 19 | 8 |
| **maker** | 9 | 2 |
| **marriott** | 9 | 2 |
| **may** | 29 | 15 |
| **me** | 174 | 199 |
| **meeting** | 13 | 24 |
| **men** | 7 | 3 |
| **mention** | 8 | 20 |
| **mentioned** | 13 | 5 |
| **met** | 9 | 20 |
| **michigan** | 74 | 34 |
| **mid** | 9 | 3 |
| **midway** | 8 | 2 |
| **mile** | 46 | 34 |
| **millenium** | 15 | 4 |
| **mini** | 21 | 13 |
| **mins** | 8 | 2 |
| **missed** | 7 | 2 |
| **modern** | 35 | 57 |
| **moment** | 9 | 20 |
| **monaco** | 22 | 15 |
| **more** | 123 | 136 |
| **morning** | 86 | 45 |
| **most** | 60 | 80 |
| **move** | 18 | 11 |
| **movie** | 8 | 3 |
| **music** | 16 | 10 |
| **navy** | 16 | 21 |
| **near** | 30 | 24 |
| **neat** | 3 | 9 |
| **need** | 55 | 45 |
| **needed** | 27 | 35 |
| **needless** | 6 | 12 |
| **negative** | 12 | 7 |
| **neighborhood** | 15 | 5 |
| **neither** | 9 | 3 |
| **nice** | 172 | 133 |
| **nicely** | 10 | 7 |
| **nicest** | 3 | 6 |
| **night** | 197 | 135 |
| **nightmare** | 2 | 7 |
| **nights** | 86 | 52 |
| **no** | 210 | 109 |
| **noisy** | 24 | 3 |
| **north** | 20 | 8 |
| **not** | 368 | 278 |
| **nothing** | 56 | 52 |
| **number** | 15 | 5 |
| **obviously** | 11 | 15 |
| **odor** | 5 | 14 |
| **off** | 87 | 55 |
| **offer** | 28 | 42 |
| **offered** | 28 | 33 |
| **offers** | 7 | 12 |
| **oh** | 21 | 6 |
| **ok** | 29 | 5 |
| **one** | 212 | 203 |
| **online** | 16 | 20 |
| **only** | 150 | 122 |
| **onto** | 6 | 3 |
| **open** | 51 | 11 |
| **opened** | 17 | 10 |
| **opening** | 8 | 1 |
| **ordered** | 20 | 24 |
| **others** | 20 | 9 |
| **our** | 254 | 211 |
| **outdated** | 6 | 3 |
| **outside** | 33 | 29 |
| **over** | 101 | 82 |
| **overall** | 45 | 74 |
| **own** | 15 | 28 |
| **paid** | 54 | 25 |
| **paint** | 9 | 3 |
| **palmer** | 21 | 16 |
| **pampered** | 9 | 0 |
| **paper** | 19 | 10 |
| **particularly** | 6 | 12 |
| **past** | 23 | 13 |
| **pay** | 42 | 38 |
| **peeling** | 11 | 0 |
| **peninsula** | 10 | maids |
| **people** | 69 | 53 |
| **per** | 28 | 15 |
| **perfect** | 37 | 63 |
| **perhaps** | 13 | 4 |
| **person** | 35 | 26 |
| **personal** | 12 | 22 |
| **pet** | 6 | 20 |
| **pier** | 15 | 21 |
| **pillow** | 8 | 18 |
| **pillows** | 30 | 22 |
| **placed** | 11 | 6 |
| **planned** | 7 | 11 |
| **please** | 13 | 7 |
| **pm** | 15 | 3 |
| **polite** | 11 | 18 |
| **poor** | 27 | 17 |
| **possible** | 11 | 7 |
| **pre** | 7 | 2 |
| **previous** | 13 | 5 |
| **previously** | 6 | 3 |
| **price** | 85 | 66 |
| **prices** | 12 | 22 |
| **problem** | 48 | 23 |
| **process** | 7 | 11 |
| **professional** | 8 | 21 |
| **program** | 7 | 2 |
| **public** | 17 | 2 |
| **put** | 44 | 19 |
| **queen** | 11 | 17 |
| **questions** | 3 | 6 |
| **quick** | 12 | 23 |
| **quite** | 49 | 30 |
| **radio** | 8 | 1 |
| **rate** | 62 | 19 |
| **reach** | 6 | 3 |
| **ready** | 16 | 27 |
| **really** | 91 | 107 |
| **reasonable** | 15 | 22 |
| **reasonably** | 6 | 3 |
| **recent** | 5 | 21 |
| **recommended** | 16 | 19 |
| **record** | 7 | 2 |
| **regency** | 6 | 31 |
| **regular** | 11 | 6 |
| **relatively** | 3 | 6 |
| **relax** | 2 | 32 |
| **relaxed** | 3 | 9 |
| **removed** | 10 | 0 |
| **renovated** | 13 | 6 |
| **renovations** | 9 | 3 |
| **replaced** | 7 | 2 |
| **request** | 26 | 10 |
| **requested** | 38 | 23 |
| **reservations** | 17 | 28 |
| **respect** | 3 | 7 |
| **response** | 9 | 1 |
| **restaurant** | 69 | 84 |
| **restaurants** | 55 | 37 |
| **review** | 22 | 7 |
| **ridiculous** | 15 | 11 |
| **river** | 32 | 12 |
| **rock** | 30 | 41 |
| **romantic** | 8 | 18 |
| **room** | 484 | 441 |
| **roomy** | 8 | 1 |
| **royalty** | 1 | 11 |
| **rude** | 40 | 51 |
| **running** | 14 | 5 |
| **rush** | 11 | 6 |
| **safe** | 13 | 7 |
| **saturday** | 17 | 3 |
| **say** | 75 | 89 |
| **saying** | 14 | 4 |
| **seasons** | 12 | 0 |
| **second** | 46 | 16 |
| **security** | 18 | 1 |
| **seems** | 15 | 20 |
| **seen** | 11 | 16 |
| **selection** | 11 | 7 |
| **self** | 8 | 2 |
| **service** | 217 | 254 |
| **set** | 29 | 17 |
| **several** | 42 | 31 |
| **severely** | 3 | 6 |
| **sheraton** | 12 | 33 |
| **shocked** | 6 | 3 |
| **shops** | 14 | 6 |
| **short** | 28 | 33 |
| **show** | 23 | 11 |
| **showed** | 11 | 7 |
| **showers** | 8 | 2 |
| **side** | 27 | 10 |
| **since** | 45 | 37 |
| **sitting** | 13 | 5 |
| **situation** | 16 | 10 |
| **skyline** | 2 | 10 |
| **sleek** | 2 | 8 |
| **slightly** | 9 | 1 |
| **slippers** | 7 | 3 |
| **small** | 118 | 31 |
| **smell** | 8 | 37 |
| **smoke** | 10 | 27 |
| **smoking** | 9 | 25 |
| **so** | 235 | 205 |
| **soda** | 8 | 1 |
| **someone** | 39 | 33 |
| **something** | 43 | 36 |
| **somewhere** | 11 | 16 |
| **soon** | 10 | 27 |
| **sort** | 7 | 12 |
| **special** | 25 | 36 |
| **spectacular** | 3 | 9 |
| **spending** | 6 | 11 |
| **spent** | 29 | 32 |
| **spoke** | 9 | 1 |
| **spotless** | 2 | 7 |
| **spots** | 2 | 8 |
| **st** | 7 | 3 |
| **staff** | 269 | 267 |
| **stairs** | 8 | 2 |
| **stand** | 9 | 1 |
| **starbucks** | 11 | 7 |
| **start** | 21 | 14 |
| **started** | 10 | 18 |
| **stayed** | 224 | 218 |
| **staying** | 72 | 123 |
| **steakhouse** | 3 | 7 |
| **step** | 3 | 8 |
| **still** | 60 | 29 |
| **stood** | 3 | 6 |
| **store** | 9 | 3 |
| **street** | 62 | 11 |
| **stuff** | 11 | 6 |
| **suggest** | 1 | 9 |
| **suite** | 53 | 55 |
| **suites** | 10 | 45 |
| **superb** | 7 | 11 |
| **surely** | 1 | 8 |
| **surprise** | 9 | 3 |
| **switched** | 7 | 3 |
| **t** | 263 | 240 |
| **table** | 15 | 5 |
| **taken** | 16 | 11 |
| **takes** | 3 | 6 |
| **taste** | 5 | 12 |
| **tasted** | 3 | 7 |
| **tell** | 28 | 18 |
| **telling** | 10 | 1 |
| **temperature** | 7 | 3 |
| **terrible** | 14 | 22 |
| **them** | 84 | 78 |
| **then** | 91 | 48 |
| **think** | 62 | 39 |
| **third** | 10 | 2 |
| **this** | 403 | 380 |
| **though** | 62 | 47 |
| **three** | 41 | 22 |
| **throughout** | 23 | 12 |
| **thru** | 10 | 0 |
| **time** | 145 | 191 |
| **tip** | 15 | 5 |
| **today** | 10 | 0 |
| **toilet** | 28 | 16 |
| **toiletries** | 7 | 2 |
| **told** | 93 | 47 |
| **too** | 67 | 61 |
| **took** | 63 | 76 |
| **top** | 52 | 37 |
| **touches** | 9 | 1 |
| **tower** | 40 | 15 |
| **train** | 25 | 2 |
| **trash** | 2 | 7 |
| **travel** | 40 | 31 |
| **traveling** | 12 | 22 |
| **tub** | 30 | 13 |
| **twice** | 15 | 11 |
| **two** | 116 | 77 |
| **type** | 11 | 15 |
| **unable** | 10 | 7 |
| **uncomfortable** | 19 | 8 |
| **up** | 178 | 142 |
| **updated** | 10 | 1 |
| **upgraded** | 23 | 6 |
| **upon** | 37 | 53 |
| **upper** | 6 | 3 |
| **upscale** | 9 | 19 |
| **upset** | 7 | 3 |
| **use** | 60 | 0 |
| **used** | 37 | 27 |
| **valet** | 32 | 20 |
| **value** | 23 | 3 |
| **ve** | 63 | 39 |
| **very** | 341 | 293 |
| **via** | 8 | 3 |
| **view** | 85 | 78 |
| **visited** | 6 | 21 |
| **visiting** | 17 | 38 |
| **wait** | 35 | 57 |
| **walked** | 26 | 36 |
| **wall** | 36 | 10 |
| **walls** | 34 | 18 |
| **want** | 55 | 65 |
| **wanted** | 26 | 54 |
| **warm** | 18 | 28 |
| **was** | 563 | 542 |
| **waste** | 7 | 10 |
| **water** | 83 | 46 |
| **we** | 374 | 267 |
| **wedding** | 11 | 23 |
| **weekend** | 66 | 86 |
| **well** | 129 | 119 |
| **whenever** | 9 |  |
| **whether** | 2 | 10 |
| **while** | 77 | 109 |
| **wi** | 11 | 17 |
| **will** | 157 | 201 |
| **willing** | 3 | 9 |
| **windows** | 31 | 5 |
| **wine** | 37 | 26 |
| **within** | 41 | 21 |
| **without** | 40 | 23 |
| **woke** | 16 | 10 |
| **wood** | 3 | 6 |
| **working** | 25 | 20 |
| **worn** | 13 | 5 |
| **worst** | 24 | 29 |
| **wouldn** | 33 | 13 |
| **wow** | 7 | 10 |
| **year** | 30 | 22 |
| **years** | 33 | 12 |
| **you** | 276 | 230 |
| **your** | 91 | 84 |
|  | 1 | 10 |

**Results**

There are 635 words extracted from the training datasets. Hence, with the use of these data the proponents were able to classify the test review sets as truthful or deceptive with the use of the Naïve Bayes Classifier.

To determine the accuracy of the classifier the confusion matrix was used. The table below shows the results of the testing phase where in the 320 lines of data was processed.

|  |  |  |  |
| --- | --- | --- | --- |
|  | TRUTHFUL | DECEPTIVE | TOTAL |
| TRUTHFUL | 100 | 60 | **160** |
| DECEPTIVE | 126 | 34 | **160** |
| TOTAL | **226** | **94** | **320** |

As a conclusion with the use of the confusion matrix presented above the model used in has gained an **70.63% accuracy level** and a **miscalculation rate of 29.37%.** Additionally, for the truthful data a rate of **62.50% is given for the True Positive** Category, while a **37.50% is given to the false positive**. Thus, for the deceptive data a **78.75% is considered True Positive** while **21.25% is considered false positive**.

**Insights**

**References**

Tatman, R. (2017, July 18). Deceptive Opinion Spam Corpus. Retrieved March 17, 2018, from <https://www.kaggle.com/rtatman/deceptive-opinion-spam-corpus/discussion>

Deceptive Opinion Spam Corpus Myle Ott. (n.d.). Retrieved March 17, 2018, from <http://myleott.com/op-spam.html>