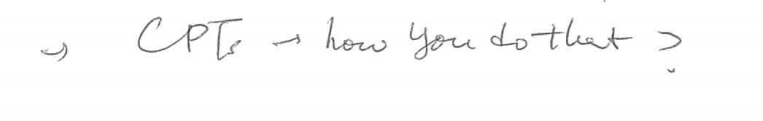
PHD - Progress update 10/11/2015

Fauzy Bin Che Yayah

Nov 10, 2015



The CPT ( Conditional Probability Table ) can be generated via Recursive Partitioning and Regression Trees

Using the RPart and applied to the sample dataset of the Trouble Ticket for 21k+ sample records with 4 independent variables below :-

|  |
| --- |
| rc\_after |
| ccat\_after\_factor |
| symp\_after\_factor |
| cc\_after\_factor |

gx <- as.data.frame(table(predict(tree.1, data\_test, type = "class")))  
kable(gx, digits=2 , format = "html" , padding = 0)

Var1

Freq

\*PMW/RFC completed

0

\*TNB Power Restore

0

3rd Party\_D/S cable replaced

0

3rd Party\_D/S cable restored

0

3rd Party\_D/S Pair Changed

0

3rd Party\_D/S Pair restored

0

3rd Party\_Drop/Int.FiberReplce

0

3rd Party\_Drop/Int.FiberRestrd

0

3rd Party\_FDC\_Replaced

0

3rd Party\_FDP\_PatchNormalised

0

3rd Party\_FOC\_D/S CableReplce

0

3rd Party\_FOC\_E/S CableRestord

0

3rd Party\_FOC\_E/S Switch Stdby

0

3rd Party\_FOC\_Joint Respliced

0

3rd Party\_FOC\_PatchNormalised

0

3rd Party\_FOC\_Tie CableReplce

0

3rd Party\_FOC\_Tie CableRestord

0

3rd Party\_Jumper replaced

0

3rd Party\_Jumper restored

0

3rd Party\_Tie Copper Problem

0

ACPDB reset

0

ADSL MODEM CHANGED

0

ADSL MODEM RECONFIGURED

0

Adv\_Cust

56

Advise Customer

1951

Advise TMUC

0

AdviseTMUCtoProvide full info

0

Alarm\_Disabled

0

ATA Replaced

0

ATA&Dect Phone\_Replaced

0

ATA&PG\_Replaced

0

ATA\_Replaced

0

Auto-Reset bypass

0

Auto-Reset replaced

0

BRAS\_\*Resolved By ANOC

0

BRAS\_Reset Card

0

Building power restored

0

Cable Repair Completed

0

Cable\_Reconnected

0

CCP\_CPE Replaced

0

CCS BTU Configured

0

CCS CPE Configured

0

Change cabling/connector

0

Change port

0

Change Rectifier

0

Change Wireless Channel Mode

151

Change/Reset Card

0

Change\_Cable

0

Change\_ONU

0

Change\_STB

0

CKC Restored

0

Clear While Localising

0

Clear while localizing

0

ConfigurationError

0

Configure Customer Account

34

Configure\_BRAS

0

Configure\_STB

0

Connector\_Replaced

123

Control card replaced

0

Control card reset

0

CUST CONFIRM CCT UP&SATISFIED

0

CUST TO CHECK STATUS

0

Customer Abroad

0

Customer CPE Own Configuration

0

Customer\_Reconnect CPE

0

Customer\_ResetModem

0

Customer\_ResetONU

0

Customer\_Reuse Supplied TM CPE

0

CWL CANNOT GET CUSTOMER

0

D/S Cable Replaced

0

D/S Cable Restored

0

D/S Fiber cable replaced

154

D/S Fiber cable restored

0

D/S Pair Changed

152

D/S Pair Restored

0

Dect Phone Replaced

75

Dect Phone\_Replaced

0

Dispatch activity to NGN NOC

0

Dispatch activity to NOC1 HBC

0

Dispatch activity to RNO

0

Dispatch activity to TVNOC

0

Dispatch\_Activity\_to\_NOC1\_HBC

0

DP\_Re-jumper

83

E/S Fiber cable replaced

0

E/S Fiber cable restored

0

E/S pair replaced

0

E/S stdby fiber cable restored

0

FDC\_Change Port

0

FDP\_Change

0

FDP\_Change Connector

0

FDP\_Change Port

0

FDP\_FASC\_Connector\_Cleaned

0

FDP\_FASC\_Connector\_Replaced

147

FDP\_Repaired

58

FDP\_Replaced

0

FDP\_Splitter Replace

0

Firmware & Software upgrading

0

Firmware\_Update

0

FOC\_D/S cable replaced

0

FOC\_D/S cable restored

0

FOC\_D/S core changed

0

FOC\_D/S core restored

0

FOC\_E/S cable replaced

0

FOC\_E/S cable restored

0

FOC\_E/S core changed

0

FOC\_E/S core restored

0

FOC\_OFM Pull n Resplice Cable

0

FOC\_Tie cable replaced

0

FOC\_Tie cable restored

0

Follow-up on new TR

0

HDSL MODEM RESET

0

HomePlug\_Replaced

0

Incorrect Info

0

Install Lightning Arrestor

0

Int.\_Wiring Replaced/Repaired

0

Jumper Changed

45

Jumper\_changed

0

Lock port done

0

ME\_OFM\_Splicing fiber

0

Modify\_Account

0

Modify\_EPG

0

MSAN fan replaced

0

MSAN IGMP setting reconfigured

0

MSAN mcast setting reconfig

0

MSAN PON card replaced

0

MSAN PON card reset

0

MSAN POTS card replaced

0

MSAN POTS card reset

0

MSAN reconfigured

0

Network\_Link\_Restored

0

NOD\_IMS Modify Routing

0

Normalise\_CPE Connection

0

Normalise\_Power AdptrConnct.

0

NSP\_Activate/Deactve Signallng

0

NSP\_Restart Signalling

0

NTT in Progress

0

NTT\_Resolved

78

ODF Patch\_Conntr. Repatched

0

ODF Patch\_Opt TieCableReplaced

0

ODF Patch\_Patch Cord Replaced

0

ODF Patching\_Fiber Normalised

0

ODF repaired

0

OLT fan replaced

0

OLT IGMP setting reconfigured

0

OLT mcast setting reconfigured

0

OLT PON card reset

0

OLT reconfigured

25

ONU&DectPhone\_Replaced

0

ONU&PG\_Replaced

0

ONU&STB\_Replaced

0

ONU\_Change port

0

ONU\_Config\_Changed

45

ONU\_Hang

0

ONU\_Missing Config

0

ONU\_Reconfigure password

0

ONU\_Replaced

231

ONU\_Reset

104

Others

0

Others\_Prob\_Action by RNO

0

Packaged\_Added

0

Patch cord at cabinet replaced

0

Patch\_Opt Connectors Cleaned

0

Patch\_Opt Tie cable Repair

0

Patch\_Opt Tie cable Replaced

0

Patching\_Connector Repatched

0

Patching\_Fiber Normalised

54

Patching\_Opt Connct Replaced

98

Patching\_Opt. Connct Repatched

0

Patching\_Patch Cord Replaced

0

Patching\_Replace Patch Cord

0

PG&Dect Phone\_Replaced

0

PG&STB\_Replaced

0

PG\_Config\_Changed

535

PG\_Replaced

210

PG\_Reset

0

PLAN MTCE BY CUST/VENDOR

0

Planned Maintenance Completed

0

PMW in Progress

0

Port Change

140

Port Reset

67

Power Adaptor Replaced

389

Premise Under Renovation

0

Problem\_Restored

62

Re-activate

0

re-configure router

0

Reboot\_OLT

0

Reboot\_STB

0

Reconfig Sync

0

Replaced

0

Reset

0

Reset\_OLT\_Port

0

Reset\_Password

0

Resolved By Account Service

0

Resolved By NTT

87

Resolved\_By\_ANOC

0

Resolved\_By\_Billing

0

Resolved\_By\_HBC

0

Resolved\_By\_NOC

0

Resolved\_By\_NOVA

36

Resolved\_By\_RNO

0

Resolved\_By\_Vendor

0

Restored by Others

0

RESTORED WHILE COORDINATING

0

Restored while localising

0

RETIGHTEN CONNECTOR BY CUST

0

Room aircond replaced

0

RWT CUSTOMER SATISFIED

164

SLT Phone replaced

0

STB&Dect Phone\_Replaced

0

STB\_Cable\_Replaced

0

STB\_Config \_Changed

0

STB\_Firmware\_Downgraded

0

STB\_Firmware\_Upgraded

0

STB\_MAC\_Add \_Registered

0

STB\_Reboot

0

STB\_Replaced

71

STB\_Reset

0

Surge Arrestor Replacement

0

Tested Normal

0

TM TEST OK

0

TM\_CPE\_IW\_RJ11 Repaired

0

TM\_CPE\_IW\_RJ11 Replaced

62

TM\_CPE\_IW\_RJ11 Replaced OTC

0

TM\_CPE\_IW\_RJ45 Repaired

0

TM\_CPE\_IW\_RJ45 Replaced

0

TM\_CPE\_IW\_RJ45 Replaced OTC

0

TM\_CPE\_PG Config Problem

0

TM\_CPE\_PG Hang

0

TM\_CPE\_Voice Change Number

0

TM\_FTB Drop Fiber repaired

0

TM\_FTB Drop Fiber replaced

69

TM\_FTB FASC connector replaced

120

TM\_FTB Replaced

0

TMCPE Replaced

0

TNB Power Supply Restored

0

TNB/SESB/SESCO power restored

0

Trunk/uplink card replaced

0

Trunk/uplink card reset

0

Unbind\_MAC\_Add

0

User\_Account

0

User\_ID ReActivate

0

VDSL\_Config\_Changed

0

VDSL\_Jumper Reconnect

0

VDSL\_Modem&DectPhone\_Replaced

0

VDSL\_Modem&PG\_Replaced

0

VDSL\_Modem&STB\_Replaced

0

VDSL\_Replaced

468

VDSL\_Reset

57

VLAN changed

118

VSAT ACTION BY CUSTOMER

0

# Next update

Prediction via SVM