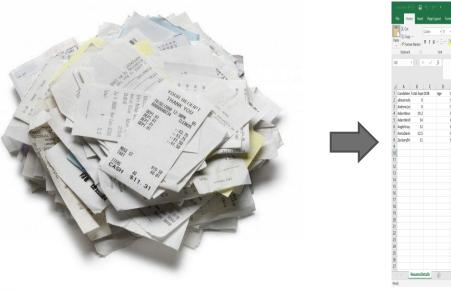
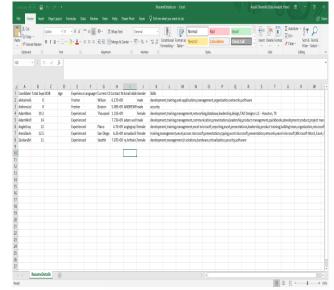


# Optical Character Recognition for Receipts and Data Extraction



### With Optical Character Recognition and Text mining using Conventional Neural Network and Recurrent Neural Network







#### ् 🕁 😈 \varTheta :

### ((aress)) Optical Character Recognition for Receipts and Data Extraction

Upload

Select Receipts

Choose Files No file chosen

Download Sample Receipt Click Here



### ((aress)) Optical Character Recognition for Receipts and Data Extraction

RUN INTELLIGENT OCR

#### This is a list of the files you just uploaded, click on them to load/View them

- 20180131\_155859.jpg
- 20180131\_155927.jpg
- 20180131\_160014.jpg



### ((aress)) Optical Character Recognition for Receipts and Data Extraction

B RUN INTELLIGENT OCR



This is a list of the files you just uploaded, click on them to load/View them

- 20180131\_155859.jpg
- 20180131\_155927.jpg
- 20180131\_160014jpg









### ((aress)) Optical Character Recognition for Receipts and Data Extraction

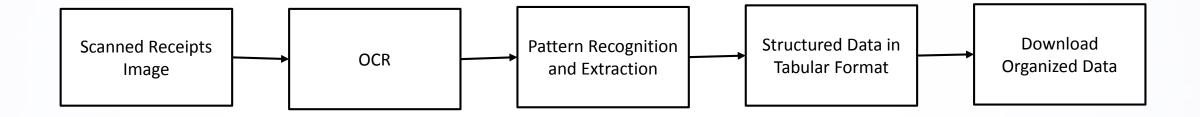
file	total_charge	amount_include_vat	amount_exclude_va	tvat_charge	card_type	receipt_num	trans_num	transaction_status	tid	company_num	billing_date	card_num	exp_date
<b>0</b> 20180131_155859	5.90	5.90	4.92	0.98	master card	01.103.000430bi.l		confirmed	103	2309787	2018-01-24		
1 20180131_155927	5.25	5.25	4.38	0.87		00024340							
<b>2</b> 20180131_160014	3.95	3.95	3.90	0.05	mastercard	28410	377049574779				2018-01-10		10/19

#### DOWNLOAD OUTPUT

п номе

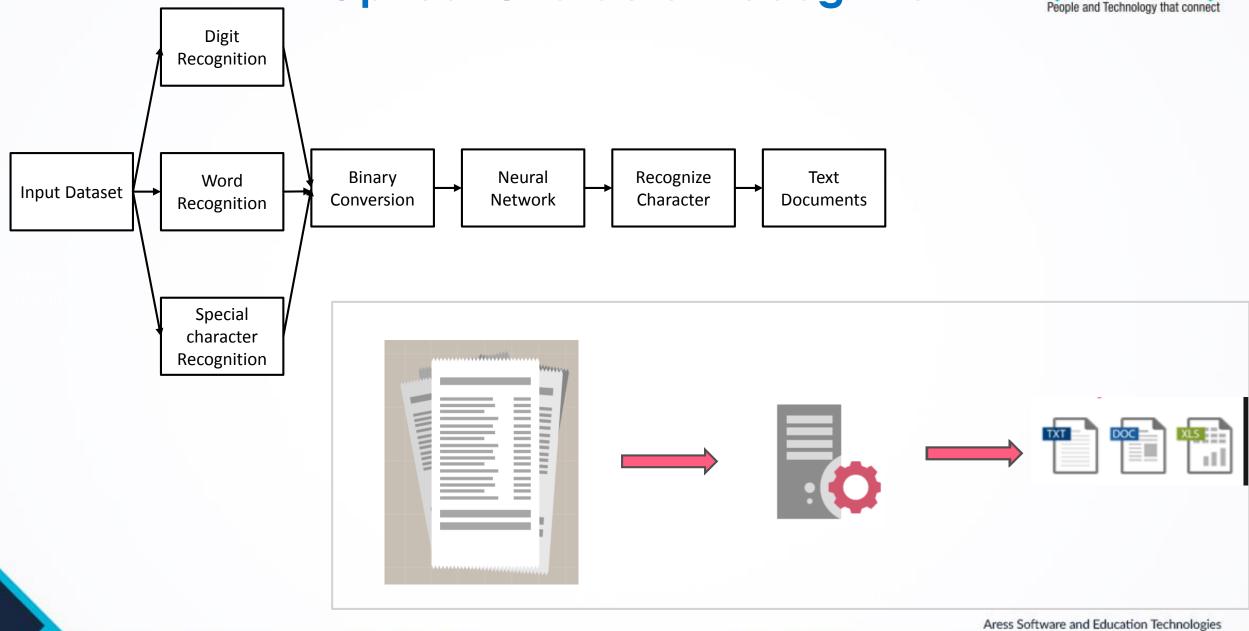
### **Model Architecture**



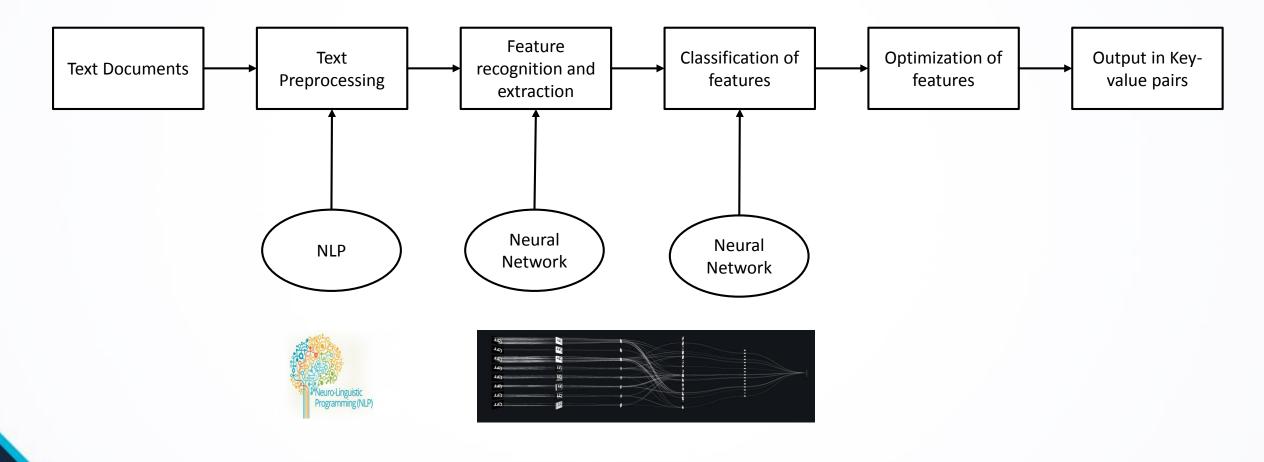


# **Optical Character Recognition**

((aress)







# **Input Sample**





MIDLAND EXPRESSWAY LIMITED Operations Centre, Express Way, Weeford, Lichfield WS14 OP Phone: 0330 660 0790 Web Site: www.m6toll.co.uk Company No. 2309767 VAT No 6B-778-5336-80 Receipt										
Veh. Class: Tariff:	2 WEEKDAY	exc. VAT 00%) inc. VAT	f4.92 f0.98 f5.90							
Payment(s):	No XXXX Expiry dat Start Val. Card swipe Your accou	Card MASTER CARD No XXXXXXXXXX9472 Expiry date: 10/19 Start Val. : / Card swiped, transaction confirmed Your account will be debited by this amount. Please keep this copy								
		Tot	Total Paid:							
Great Wyrley TID/Lane: Operator:	103 3350	24/01/2018 Trans. No: Receipt No:	15:01 01.103.0 01.103.0							

# **OCR** Output

 $\times$ 



20180131\_155859 - Notepad File Edit Format View Help MIDLAND EXPREF5WAY 1.1MI1t:';u Upe'atlons CBHt'e Express Hay WtHffltd 1111f1e11 0014 023 Phone: 0330 600 0?00 Heb Si ite: www n10t01100 Uk Company NO. 2300707 VAT NO 00 770 14£ 7E E Receipt Veh. Class: 2 Anwuu1t (<1 VAT £4.33 Tariff: HEEKDQY VAT £ 0 0031 £0.98 Am0011t lnc. VAT £5.90 Payment(s1: Card MASTER CARD £5.90 ' NØ XXXXXXXXXX947? Expiry date : 10/13 Start Val. : / Card swiped. transautiun conflrmed Your account will be debited by this amount. Please keep this copy Total Paid: £5.90 Great Hyrley 24/01/2018 15 01 TID/Lane: 103 Trans. NO: 01.1L3 001334051 Operator: 3350 Receipt N0: 01.103.000430b1.0

20180131\_160844 - Notepad File Edit Format View Help \*1 25L OFF LUP 015r00N 0'20 00.20 2 CR013 BUTILR 1.75 03,50 Total To Pay 2 0.05 \*-4 ~ H - - VA} ANALYSIS . yAT 20% m 0.51 Zero R0190 m 0.00 E

Net b . 04 ~'-\* . PAYMENT SUMMARV Received a 6.55

Card Name: Auto Dudliiy

CARDHOLUER COPY Welcome Break M6 Motorway Jct 15/16 SIB 5H0

Date 09/01f18 Time 08:01:24 Herohani Identifier xxrxfilea Terminal ID xxrr1070 Rece1pt \_'\_> 28119 Transaction number 360000224430 Card data source CONTACTLESS Card scheme MAS1EROABD Card number KIKIIWW\*\*\*\*94/2 Authorisation code \_\_040350 Application ID A000000041010 Issue number 00 Transact1on Purchase Goods and Services 6.55GBP TOTAL B.SSGBP

Verification Cardholder N01 Ver\fied Your account wil] be debited with the above amount.

Please retain for your records Thank you

2244 mam \$230303; 1196 '\_ 09/01/2018 08:02

Atul Gholap\_Java Developer.txt

# Model Output



AutoS		H H									Rece	iptDetails.csv	- Excel					Anja	ali Dharmik	: (Data Analy	st, Pune)	m –	0	×
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2 2018	-	5.9	5.9	4.92		master car 0			confirme	d 103	2300707	7 ########												
3 2018	-	5.25	5.25	4.38	0.87		24340																	
4 2018		3.95	3.95	3.9		mastercar	28410	3.77E+11				########	1.11E+1	6 Oct-19										
	80131	14.47	14.47	14.3	0.17							###########												
	80131_1		10	5.27		mastercard																		
	80131_ 80131	1.6 12	1.6 12	0.8 10	0.8	mastercard							xwxxxxw	wxxx9472										
	80131 80131 1		12	10	2																			
_	80131_1 80131_1			1.49	0		3/5999																	
_	80131_1	4.4	4.4	3.67	0.73	mastercar																		
	80131_	4.9	4.9	4.9	0.75		1/9511																	
	80131	5.9	5.9	4.92		master card				108	230976	7		Oct-19										
	80131 1		5.5	1.52		mastercar		3.7E+11		100	2000701			000 15										
_	80131 1			0.34		mastercard																		
	80131		22.01	20		mastercar 0	1/6944/0	166				#########	xxxxxxxx	o Oct-19										
7 2018	80131	5.84	5.84	5.64	0.2	mastercar	30102	360m50555	5760			#########												
8 2018	80131_1	60409		7.41		mastercard						########												
9 2018	80131_1	60419																						
0 2018	80131_ :	105.0004	105.0004	104.02	0.98	master card				105	2309767	7												
1 2018	80131_1	60725		4.95		mastercard						########												
2 2018	80131_	5508	5508	5507.02	0.98	master car	5508			608	230976	7		Oct-19										
3 2018	80131_	8.5	8.5	6.5	2	mastercard																		
4 2018	80131_1	60824				mastercard																		
5 2018	80131_	6.609	6.609	5.35	1.26	master card				609	2309767	7												
5 2018	80131_	6.55	6.55	3.3	3.25		28119	3.6E+11				########												
7 2018	80131_1	60909		0	0																			
4	R	eceiptDe	tails	+)										:	4						1		<u> </u>	



# Thank you for viewing the presentation about AI powered optical character recognition for receipts and data extraction

We request you to kindly share the receipts which you need to get processed by sending an email to <u>Devdatta.Kumbhare@aress.com</u> and we will get back to you with our analysis within 4 working hours.