
// .XPRESSION


Technology increases
productivity... Right?

431,000

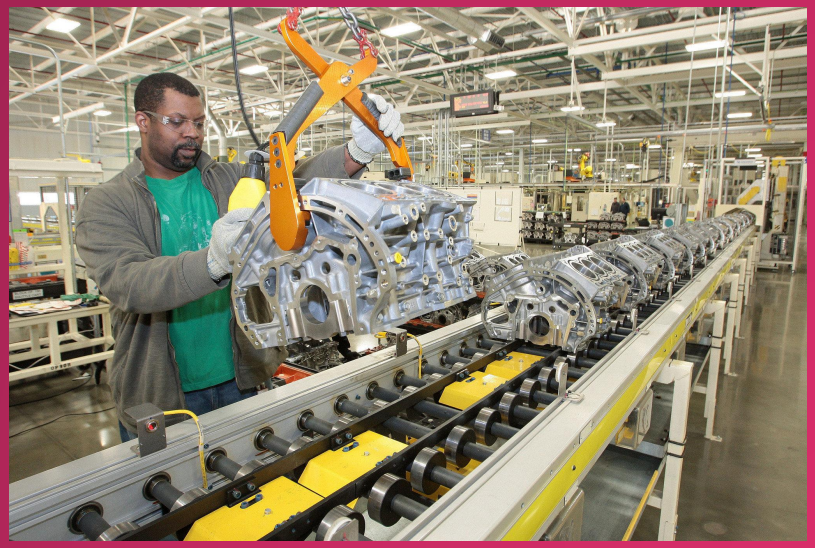
The number of people injured from distracted driving in 2014.

DISTRACTIONS

What features in a scene are correlated with distraction?

DISTRACTIONS

Who cares?



DISTRACTIONS

Who cares?

Market:

Tools:


TERADATA.
ASTER

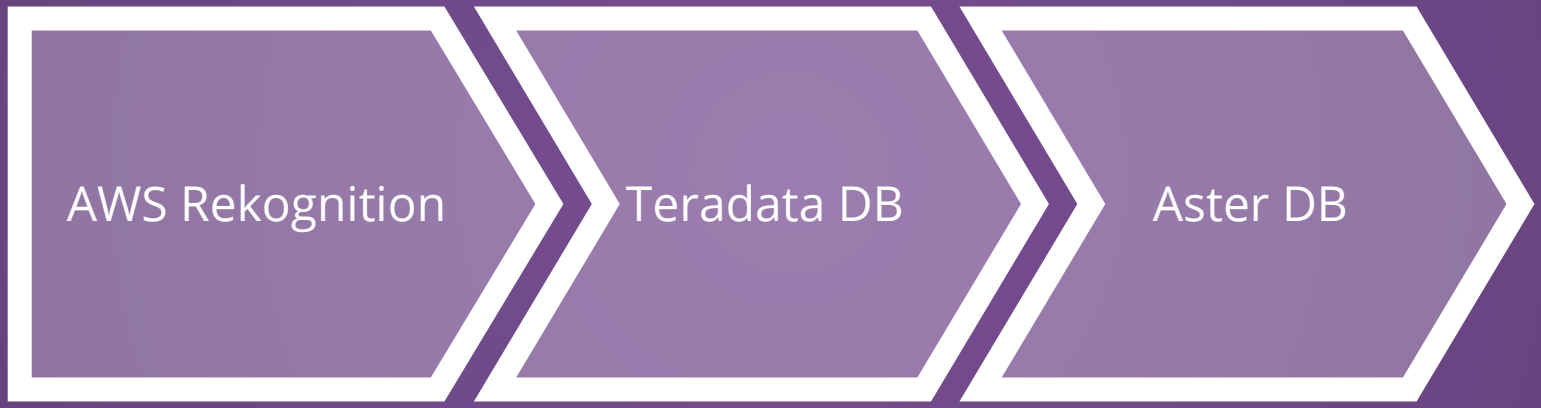

TERADATA


amazon
web services

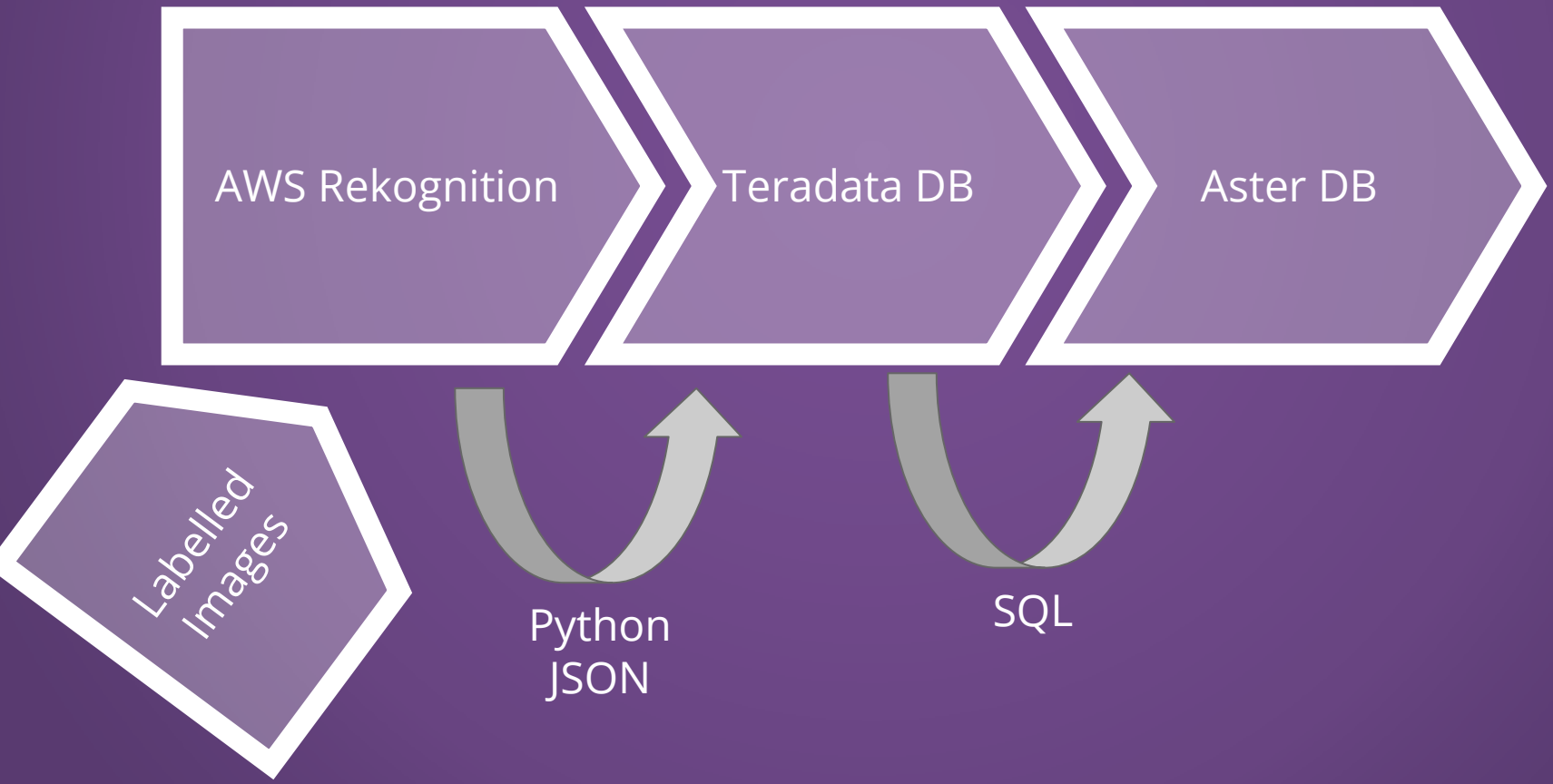

python™


kaggle™

THE PLAN



THE PLAN


AWS Rekognition
Teradata DB
Aster DB
Labelled Images
Python JSON
SQL

GETTTING DATA

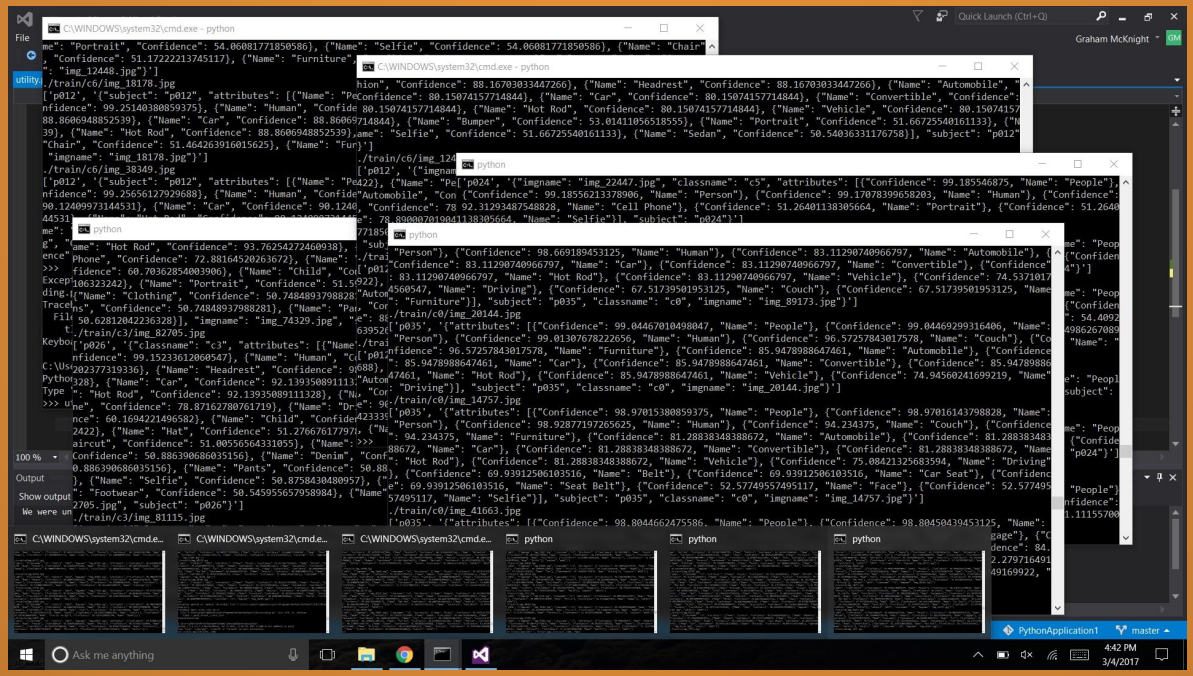
Labelled Dataset from Kaggle (StateFarm Competition)

20,000 Images

AWS Rekognition

Uploaded using Python scripts

More Python scripts to get several requests simultaneously



Teradata Database

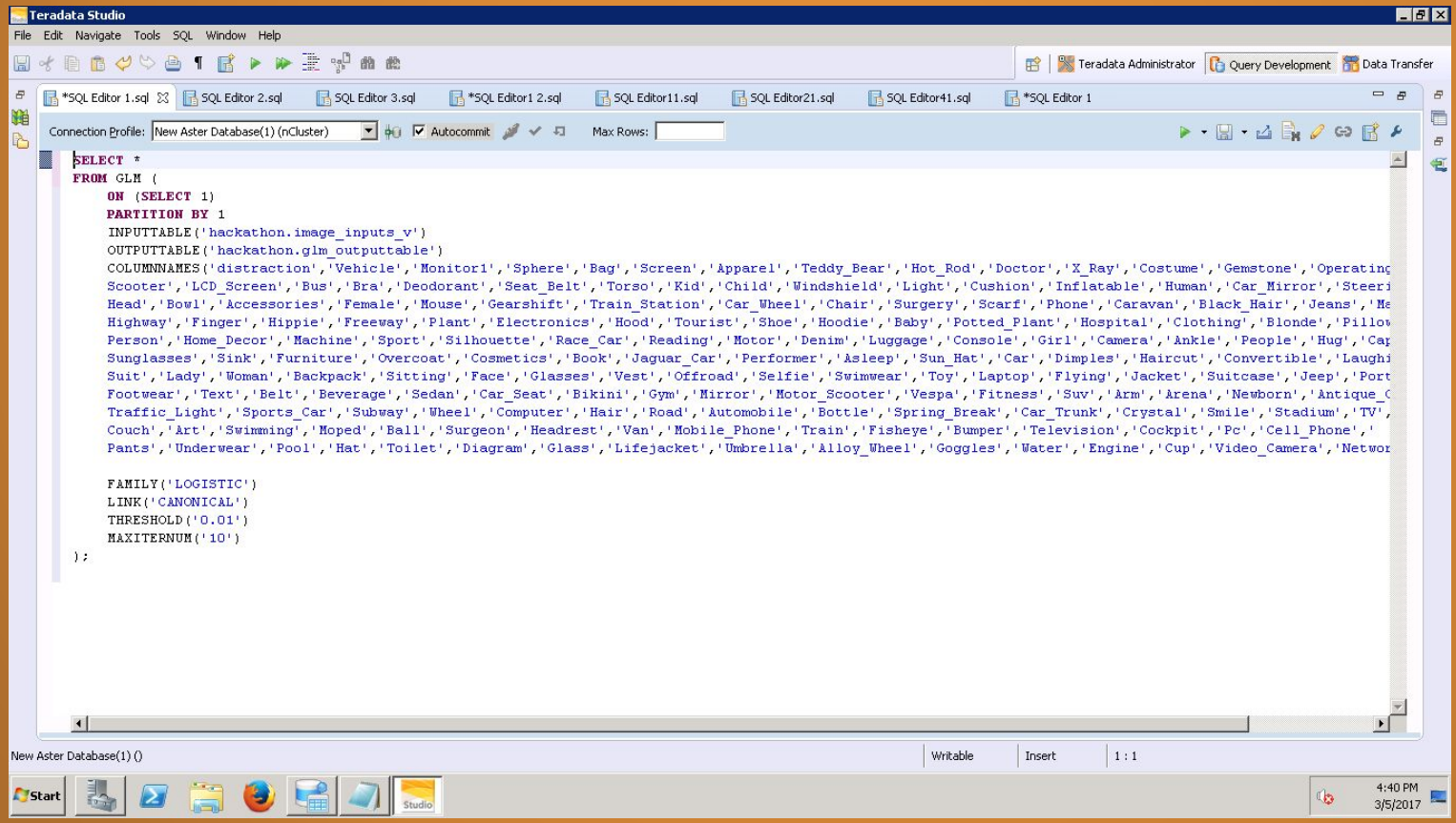
First converted JSON from Rekognition to CSV (Python)
Reformatted to sort by Rekognition tags
Removed least common tags (Potted plant, Whale, Lingerie...)
Uploaded data to Teradata DB

Aster Analytics

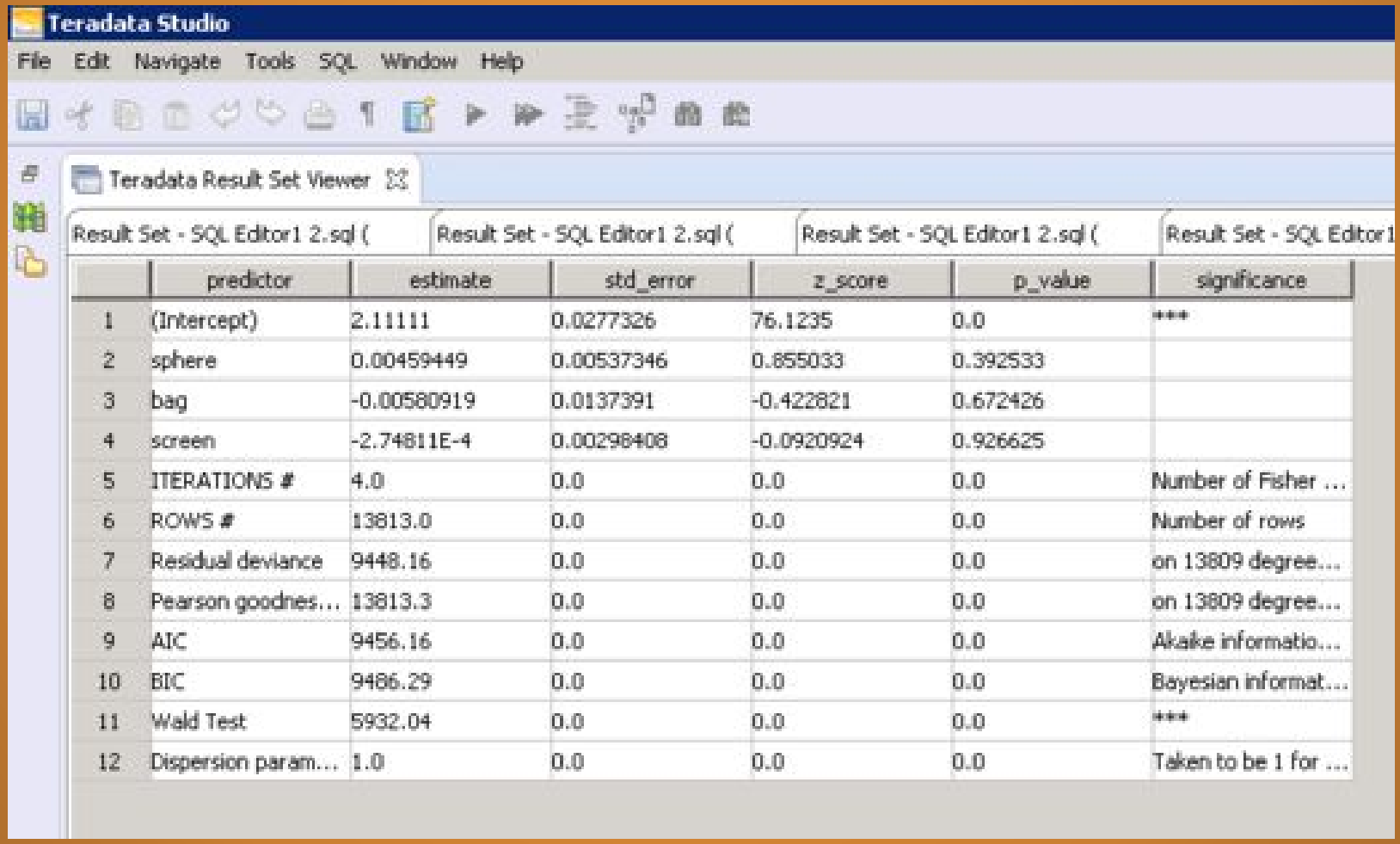
At first we saw a lot of error messages...

Aster Analytics

But ended up getting GLM working!



Aster Analytics



	predictor	estimate	std_error	z_score	p_value	significance
1	(Intercept)	2.11111	0.0277326	76.1235	0.0	***
2	sphere	0.00459449	0.00537346	0.855033	0.392533	
3	bag	-0.00580919	0.0137391	-0.422821	0.672426	
4	screen	-2.74811E-4	0.00298408	-0.0920924	0.926625	
5	ITERATIONS #	4.0	0.0	0.0	0.0	Number of Fisher ...
6	ROWS #	13813.0	0.0	0.0	0.0	Number of rows
7	Residual deviance	9448.16	0.0	0.0	0.0	on 13809 degree...
8	Pearson goodnes...	13813.3	0.0	0.0	0.0	on 13809 degree...
9	AIC	9456.16	0.0	0.0	0.0	Akaike informatio...
10	BIC	9486.29	0.0	0.0	0.0	Bayesian informat...
11	Wald Test	5932.04	0.0	0.0	0.0	***
12	Dispersion param...	1.0	0.0	0.0	0.0	Taken to be 1 for ...

Credits:

TERADATA

python™

Team TERALEXA

Credits:

TERADATA

python™

Team TERALEXA

Credits:

Team XPRESSION:

Graham

JSON

Melissa

Luyanda

Andrew

Karan

Tam

Images and Presentation Templates:

mlive.com

CarnivalSlides.com

BusinessInsider.com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The Road to Come