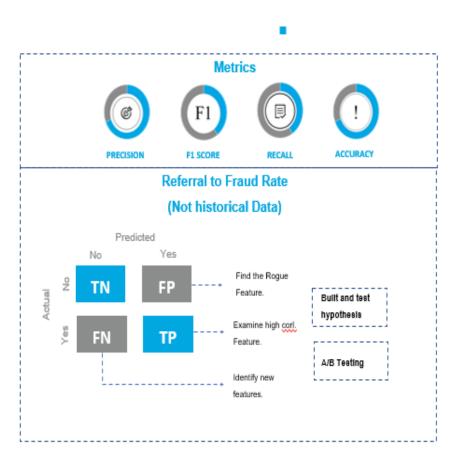
Predicting fraud leveraging data science for a large US insurer









PROBLEM STATEMENT

An American supplemental insurance major need to deal with fraudulent cases in ever-increasing claims transactions. The insurer was largely dealing the fraudulent activities with a rule-based approach of manual processing and investigation (driven by expert judgement of agents, investigators and auditors). They wanted to move to a more scientific approach leading to strategizing the next generation Fraud Analytics System.

SOLUTION OVERVIEW

- Machine learning based predictive model devised
- Implementing feature engineering techniques
 - Segmentation to detect patterns
 - Supervised learning on specific clusters to measure its strengths and further strengthen the model
- Tool stack used : Python, Splunk

- 500 basis points increase in fraud detection
- Moving from rule based fraud identification to automated way using Machine Learning

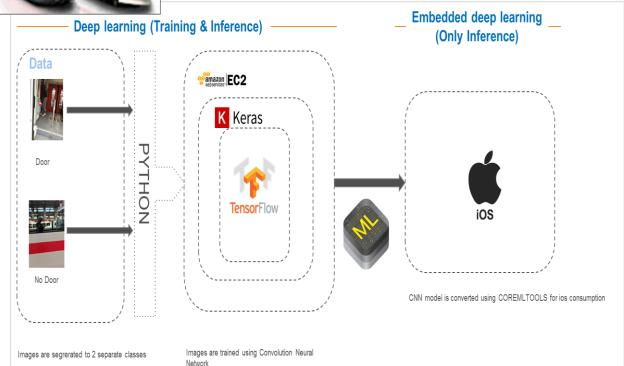
Video analytics solution using deep learning & neural networks for European Railway





Deep Learning – Image Classification





PROBLEM STATEMENT

Client wanted to test and build an innovative proof of concept to see how machine learning and analytics can help visually impaired passengers to identify the door of a train at a train station

SOLUTION OVERVIEW

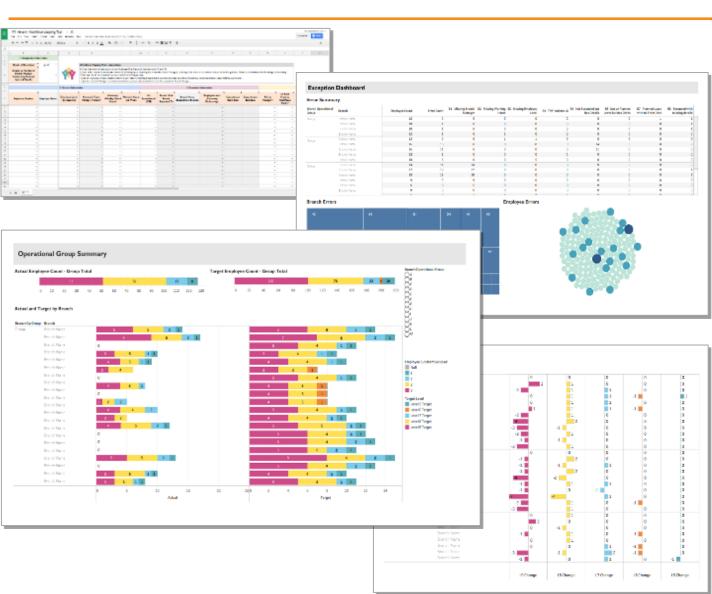
AIDING VISUALLY CHALLENGED:

Explore feasibility of using a combination of Video Analytics using Deep Learning & Mobile phone to aid visually challenged passengers locate the train door

- Neural networks trained on GPUs on cloud
- Inference running on iPhone (analytics on edge)
- Solution built in data lab

- 94% accuracy in recognizing open doors of specific train models in real time
- Tactile feedback on mobile app to alert passenger when passing open doors

Workforce & Organizational Analytics for a large UK Bank







PROBLEM STATEMENT

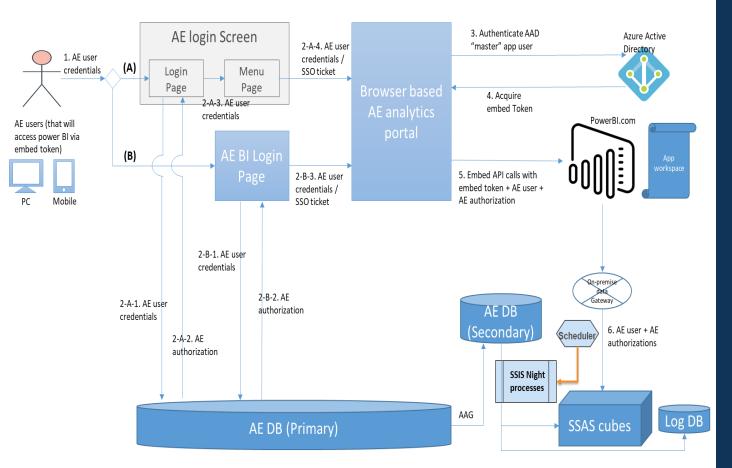
Client used to stitch together reports & scorecards manually by downloading dumps of data & then translate it using Excel. Presentations were delivered on PowerPoint. Drilling or deeper dives into the data were not possible in real time.

SOLUTION OVERVIEW

- Accurate Workforce Data: Coforge developed an automated solution using MicroStrategy allowing users to drill, self-serve and build analysis in an interactive environment. Dependency on multiple source systems was reduced to one integrated system
- Centralised Decision Making: Interactive dashboards were created for centralized decision making using MicroStrategy and Modernized EDW.

- Cost reduction of 20% Through analysis efficiency
- Reduce 7 source systems to one integrated system with one version of the truth

Self Service Analytics Platform on MSBI for a leading automobile manufacturer







PROBLEM STATEMENT

Client were in dire need to provide a self-service analytics platform for dealers within the country to monitor & track its performance and KPIs. They wanted us to provide a solution to the dealers who are not in the client domain and have easy access of the analytics platform.

SOLUTION OVERVIEW

Coforge implemented MSBI solution consisting of SQL Server 2017 database, integration services, analysis service and **portal with embedded PowerBI** for the users to do self-service analysis

- Design architecture consisting of MSBI stack
- Performance report with 5 years of data, database size of 3 TB
- Analytics platform is built on SSAS Tabular model in SQL
- The solution also included 200+ SSRS standard reports

- Direct access to analytics platform by dealers.
- Analytical cubes with an SLA of less 30 secs average for any kind of self-service analytics
- Dealer can monitor near real time performance of sales, inventory, parts movement, customer satisfaction, order management and backlog in receivables and payables leading to significant reduction in leakage and enhanced sales