Ashutosh Patel

6, Doddakannelli-Kaadubeesanahalli Rd, Bengaluru 5600035| +91 8309576921 | [patel.b.ashutosh@gmail.com](mailto:patel.b.ashutosh@gmail.com) |

Data Scientist

# Professional Summary

# Providing data-driven, action-oriented solutions for challenging business problems.

# Microsoft and IBM certified Data Scientist with 4+ years of experience in building and deploying intelligent solutions. Highly skilled in Machine Learning, Data Visualization and Analysis. Familiar with Big Data tools and integration with Cloud platform to build and deploy predictive models.

# Expertise

# Statistical Modeling Big Data tools

# Experiment Design Data Visualization

# Machine Learning Algorithms Data Mining

# Deep Learning Predictive Modeling

# Natural Language Processing Computer Vision

# ****Professional Experience****

## Deloitte US| 4th November 2019 – Present (Data Scientist Consultant)

**Deloitte Cognitive Tax – Semi Supervised Learning/Active Learning**

CognitiveTax Insight™ (CogTax) provides an increased, improved, and more efficient analysis of clients indirect tax data set. It leverages OCR, along with advanced machine learning algorithms and analytics, to effectively analyze a full population of data and documents to assist clients with indirect tax overpayment recovery and reduce the potential for future over or underpayments.

* Analyze invoice text data using python API and prepare data for statistical modeling.
* Build unsupervised model using customized statistical method to identify the potential clusters between unstructured invoice data.
* Design an active learning model to find optimal sample to label population sample.
* Implement statistical projection methods to reduce the dimensionality of data.
* Implement Multiclass Logistic Regression to identify the taxability status based on transactions details.
* Identify key features in classification and communicate to Business Team through appropriate visualization.
* Refactor implementation from scale and java to PySpark.

## UEI Universal Electronics Pvt. Ltd.| 12th August 2019 – Present (Principle Data Scientist)

**Predictive Analytics – Smart Home Automation**

* Build a pipeline for data integration, ingestion from remote SQL source.
* Perform data exploration, wrangling to format it well for modelling.
* Perform hypothesis testing to understand the pattern in data.
* Build a feed forward multilayer neural net to predict target class.
* Deploy the model using Azure Container Instance and Azure Kubernet Service.

**Accenture Solutions Pvt. Ltd. | 18th May to 11th August 2019 (Software Developer)**

**Computer Vision Application – Smart Digital Billboards**

* Develop a sophisticated and highly efficient convolution neural network based on Resnet50, Inception V3, YOLO architecture to detect and localize objects using Transfer Learning technique.
* Build custom deep neural network on Keras, tensorflow framework to classify objects.
* Pattern extraction and digit recognition from image data using Tesseracts OCR.
* Perform process optimization and model integration.

**Big Data and Data Engineering**

* Build data engineering pipeline using Azure Databricks service in Apache Spark environment.
* Perform exploratory data analysis, feature engineering, statistical test for data modelling.
* Code conversion from Python to PySpark environment.
* Build logger to capture logs in the pipeline.
* Develop code for optimized performance and harvest the power of parallel computation.
* Process big data (> 10 TB) by integrating Azure Data lake, Data Factory and SQL Warehouse.

**Supply Chain Analytics and Management**

* Develop intricate algorithms based on deep dive statistical analysis using Azure ML Services to prevent failures in SAP Hardware Returns Orders (HRM).
* Build time series and linear modelling to forecast SAP HRM.
* Analyze and process complex data sets using advanced querying, visualization and analytics tools.
* Automate and optimize the supply chain management.
* Identify, and recommended improvement strategies for KPIs across different business areas.

**Teaching Appointments**

* Deliver Classroom Trainings on Data Science Tool-kit.
* Deliver Green Field Trainings to entry level new joiners.
* Develop wiki documents.
* Work as an integral part of Learning and Management Team.
* Research and Case Studies on Business/Industrial problems and provide data driven solutions.
* Work on various IoT implementation use cases using cloud platform such as Azure.

**Education**

M.Tech, Data Science and Engineering (in progress) April, 2019 – April, 2021 (expected)

Birla Institute of Technology (BITS), Rajasthan

Micro Masters Data Science May, 2019 – November 2020

University of San Diego, California

B.Tech, Electronics and Communication Engineering April, 2012 – April, 2016

Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar

CGPA : 7.53

# IEEE Publication

Ashutosh Patel, Pranw Kumar, Madhusmita Senapati**, “Rectangular shaped core photonics crystal fiber with zero dispersion and high Birefringence”** using complex data mining**,** International Conference on Intelligent System and Control (ISCO’16), 7 & 8th Jan. 2016, Coimbatore, India.

**Data Science Tools/Language**

Data Science tools : Python, PySpark, SQL Cloud Platform : Microsoft AzureML Frameworks : Tensorflow, Keras Visualization : matplotlib, bokeh, seaborn Programming Languages : Python, MATLAB, Octave Reporting : Power BI

**Accomplishments**

* Microsoft Spotlight – Inspiring Teacher | 2018

Delivered Classroom Trainings on Data Science (Machine Learning and Deep Learning).

* Deloitte Spot Award – Best Buddy | 2020

Peer grooming and Team collaboration to achieve highest excellence.

* President of Optical Society of America Student Chapter, KIIT. | 2015 – 2016
* Author: Together Forever

**Certification**

1. Python for Data Science

Date: September 27, 2020

Issued by: UC San Diego

1. Probability and Statistics in Data Science using Python

Date: September 27, 2020

Issued by: UC San Diego

1. Machine Learning Fundamentals

Date: October 2, 2020

Issued by: UC San Diego

1. Big Data Specialization

Date: August 28, 2020

Issued By: IBM

1. Advance Machine Learning and Signal Processing

Date: June 14, 2019

Issued By: IBM

1. Scalable Data Science

Date: June 28, 2019

Issued by: IBM

1. 70 – 774 Perform Data Science using Azure Machine Learning

Date: June 27, 2018

Issued By: Microsoft Corporation

1. Supervised and Unsupervised Learning

Date: 24th September 2018

Issued By: DataCamp

1. Deep Learning with Keras

Date: 19th October 2018

Issued By: DataCamp

1. 532 – Developing Microsoft Azure Solutions

Date: September 9, 2016

Issued By: Microsoft Corporation

I hereby **declare** that the above information is true and best of my knowledge.