Mahesh Subhashrao Kendre

Python Data Scientist – Tech Mahindra, Pune (<u>https://www.techmahindra.com/</u>)

M. Tech -- Electronics and telecommunication Engineering Dr Babasaheb Ambedkar Technological University -Maharashtra



## OBJECTIVE

To employ myself in a progressive organization that provides scope to update my practical knowledge and skills in accordance with the latest trends and be part of the team that dynamically works towards growth of the organization.

Looking for a software Python Developer Job where I can utilize my Programming skills to Develop Data Science /Machine Learning / Web Application (Django Rest Framework components/System. To achieve a challenging position as a Python Programmer in a result-oriented company, where acquired skills and education will be utilized towards continuous growth and advancement.

CONTACT

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9637275747

# **EDUCATION**

- B.E Electronics and telecommunication Engineering Vishwabharathi academy's College of Engineering ,Ahmednagar , Pune University, pune
- Mtech -- Electronics and telecommunication Engineering Dr Babasaheb Ambedkar Technological University Lonere

# <u>KEYS</u>

 Python
 Data Science
 Django
 REST
 Machine

 Learning
 ETL-Data warehousing
 Business

 Intelligence
 SQL
 Mongo
 DB
 UNIX

## **PROFESSIONAL EXPERIENCE**

Currently working as a **'Python-Data Scientist'** for 'Voice and Message Routing Optimization' with client Aussie Broadband, Australia. Strong work experience with Technology **ETL / Big Data / Business Intelligence / Analytical Language** using PySpark. Web Framework involvement: Django REST.

#### Experience with Core Data Science/ ML Libraries /Packages :

PySpark Pandas Numpy Seaborn Matplotlib Scikit Learn Keras Tensorflow Scipy Statsmodels Plotly

### Experience with Core Django REST Libraries /Packages:

Django-rest-framework | Django-cors-headers | Django-debug-toolbar | Django-extensions |Sentry-sdk| Django-allauth|Django-filter | Djangoimport-export |

## Major Tools , Associated Technologies & Environment

- Unstructured Database Used Mongo DB
- UI Application Programming Language HTML, CSS, JavaScript, JQuery and Bootstrap.
- Web Scraping Library : Beautiful Soup 4
- Web Framework involvement : Django REST
- BI Tool used Tableau
- Parsing XML xml Schema

Experience with Machine Learning Algorithm

Linear Regression | Logistic Regression | KNN |K-Means |Naïve Bayes |Mean, Median, Mode |Decision Tree |Random Forest Support Vector Machine |Principal Component Analysis |NLP |XG Boost

Process worked with:DevOps + Agile + V- Model

Software Programming Language Experience:

Python | Java | C++ | Java Script | CSS | HTML | Boot Strap | J Query
 Business Implementation Programming Experience:

Machine learning – Python | ETL – Python | Business Intelligence

Strong Experience Areas Python | SQL | Unix Data Analytics –ETL | Machine Learning Algorithm | Django Web service-REST

#### **Technology Specialization :**

Python Data Science |Big Data | Machine Learning | Django REST |Mongo DB |PySpark | ETL / Data warehousing | Business Intelligence | Unix

Currently working with client Group Televisa ,Mexicoas Data scientist for Physical Server Implementation ,Optical Omni Switch Series Synchronization [Alcatel Lucent ]

Work Experience with clients : Group Televisa , Mexico | Home Depot , USA | Civil Aviation Authority of Norway, Norway

System/Vertical Worked with : Semiconductor | Telecom OSS | Payment

### **Professional Work Experience**

Data Science / ETL/ ML & Django Rest Task as a Full-Stack Developer:

Web Development Django REST Task:

- Good experience in developing Web Applications implementing Model-View-Control Architecture using Django REST Application Framework.
- Strong expertise in development of Web-Based Applications using Python, HTML, XML, KML, CSS, DHTML, JavaScript, JSON and JQuery.
- Experience in working with **Python ORM Libraries including Django ORM, SQLAIchemy**.
- Good knowledge of Web Services with protocols SOAP, REST.
- Experience in working with continuous deployment using Heroku and Jenkins.
- Good experience in working with Amazon Web Services like EC2, Virtual private clouds (VPCs), Storage models (EBS, S3 ,instance storage), Elastic Load Balancers (ELBs).
- Experience in using various version control systems like **Git, and GitHub.** Having good knowledge in using **NoSQL** databases like MongoDB .Proficient in writing SQL Queries.
- Experience in working with **Python ORM Libraries including Django ORM, SQLAIchemy.**
- Excellent Interpersonal and communication skills, efficient time management and organization skills, ability to handle multiple tasks and work well in a team environment.

#### Data Science /Machine learning /ETL/BI Task

- Highly efficient Data Scientist/Data Analyst with overall years of experience in Data Analysis, Machine Learning, Data mining with large data sets of Structured and Unstructured data, Data Acquisition, Data Validation, Predictive modeling, Data Visualization, Web Scraping.
- 3+ years of Experience in design, development, testing and implementation of various stand alone and clientserver architecture based enterprise application software in Python on different domains
- Experience in statistical programming languages with Python including Big Data technologies like Hadoop, Hive and Pyspark.
- Proficient in managing entire data science project life cycle and actively involved in all the phases of project life cycle including Data Acquisition, Data Cleaning, Data Engineering, Features Scaling, Features Engineering, Statistical Modeling (Decision Trees, Regression Models, Clustering), Dimensionality Reduction using Principal Component Analysis (PCA) and Factor Analysis, Testing and Validation using ROC plot, K fold Cross-Validation and Data Visualization.
- Experience and deep understanding of Statistical modeling, Multivariate Analysis, Model Testing, Problem Analysis, Model Comparison, and Validation.
- Expertise in transforming business requirements into Analytical Models, Designing Algorithms, Building Models, Developing Data Mining and Reporting solutions that scale across a massive volume of structured and unstructured data.
- Skilled in performing Data Parsing, Data Manipulation and Data Preparation with methods including describe data contents, compute descriptive Statistics of data, Regex, split and combine, remap, merge, subset, reindex, melt and reshape.

- Experience in using various Libraries and Packages in python-like NLP, Pandas, NumPy, Seaborn, SciPy, Matplotlib, Sci-kit-learn, Beautiful Soup, Json, CSV, Highly skilled in using visualization tools like Tableau for creating dashboards.
- Extensive experience in Text Analytics, generating data visualizations using Python and creating dashboards using tools like Tableau.
- Hands on experience with big data tools like Hadoop, Spark, Hive, Pig, PySpark, Spark SQL.Hands on experience in implementing LDA, Naive Bayes and skilled in Random Forests, Decision Trees, Linear and Logistic Regression, SVM, Clustering, neural networks, Principle Component Analysis.
- Good Knowledge in Proof of Concepts (PoC's), gap analysis and gathered necessary data for analysis from different sources, prepared data for data exploration using data munging.
- Good industry knowledge, analytical & problem-solving skills and ability to work well within a team as well as an individual.
- Experience in designing stunning visualizations using Tableau software and publishing and presenting dashboards, Storyline on web and desktop platforms.
- Experience and Technical proficiency in **Designing**, **Data Modeling Online Applications**, **Solution Lead for Architecting Data Warehouse/Business Intelligence Applications**.
- Experience with Data Analytics, Data Reporting, Ad-hoc Reporting, Graphs, Scales, PivotTables and OLAP reporting.
- Highly skilled in using Hadoop (pig and Hive) for basic analysis and extraction of data in the infrastructure to provide data summarization.
- Worked and extracted data from various database sources like Oracle, SQL Server, DB2, regularly accessing JIRA tool and other internal issue trackers for the Project development.
- Highly creative, innovative, committed, intellectually curious, business savvy with good communication and interpersonal skills.

## **Key Skills**

٠	Frameworks:	Django, CSS , Bootstrap.
٠	Web Technologies:	HTML, CSS, Java Script, JQuery, J SON, XML.
٠	Programming Languages:	Python, HTML, CSS, SQL.
٠	Version Control:	Git, GitHub.
٠	Cloud Computing:	AWS EC2, S3.
٠	Analytic Tools:	PySpark.
٠	Application servers:	Apache Tomcat, Nginix, JBoss, WebLogic, WebSphere.
٠	Databases:	Oracle 10g, My SQL, MongoDB.
٠	IDEs/ Development Tools:	PyCharm , Anaconda – Jupyter Nb ,Atom, Spyder , Microsoft Visual Studio.
٠	Operating Systems:	Windows, Red hat Linux .
٠	Protocols:	TCP/IP, HTTP/HTTPS, SOAP.
٠	Deployment Tools:	Heroku, Jenkins.
٠	Issue Trackers:	HPALM 12.5.
٠	Web Service :	REST –JSON, DRF <mark>(Django</mark> Rest Framework)

#### Awards:

- Received "Star Performer Award" from Tech Mahindra for good performance.
- Received appreciation for E2E Delivery from client Home Depot , USA.

### Working Zone Organization

Currently working as **Python Data Scientist** with Tech Mahindra , Pune (<u>https://www.techmahindra.com/</u>)Pune since Jan 2019 to till date

#### Projects

**Project Sequence 1** 

Project Name	:	Optical Omni Switch Series Synchronization [Alcatel Lucent ]
Client		: Group Televisa ,Mexico
Vertical	:	Telecom OSS Provisioning and Activation –Inventory Management
Technology & Tool	:	Python , Django REST , Oracle ,GIT , Rest – Web Service ,Pandas, ETL, Statistical Analysis.
Role		: <mark>Python</mark> Developer

# Detail Project Overview and Workflow:

These compact, high-density, advanced Gigabit and multi Gigabit Ethernet (GigE) platforms are designed for the most demanding of converged networks. Offering high-speed flexible uplinks, 200G stacking, industry leading 95W PoE, and high density 10G multi-gigabit ports ready for Wi-Fi 6, these platforms are the right choice for the next generation of enterprise switching networks.

Offering comprehensive security features, they are well-equipped to secure the network edge. These high performance, versatile LAN switches can be positioned: At the edge of mid- to large-sized converged enterprise networks At the aggregation layer ,In a small enterprise network core,In the data center for GigE server connectivity and SDN applications.

The Alcatel-Lucent OmniSwitch 6560 Stackable Multi-Gigabit Ethernet LAN value switch family is an industry leading campus access solution for enterprise networks. With multi-gigabit ports for high-speed IEEE 802.11 ac devices, 10GigE uplinks and 20 GigE stacking, the OmniSwitch 6560 is the right solution for your next generation network.

Offering a design optimized for flexibility and scalability as well as low power consumption, the OmniSwitch 6560 is an outstanding edge solution. It uses the field-proven Alcatel-Lucent Operating System (AOS) to deliver highly available, secure, self-protective, easily managed and eco-friendly networks.

# Task Handled:

- Understand the FRS document and analyze the requirement, specifications and also in client interaction during requirements specifications.
- Designed the front end of the application using Python, HTML, CSS, AJAX, JSON and JQuery. Worked on backend of the application, mainly using Active Records.
- Involved in analysis and design of the application features, designed and developed communication between client and server using Secured Web services.
- Created UI using JavaScript and HTML5/CSS, Developed and tested many features for dashboard using Python, Java, Bootstrap, CSS, JavaScript and JQuery.
- Wrote backend programming in Python, used JavaScript and XML to update a portion of a webpage.
- Developed consumer based features and applications using Python and Django in Test Driven Development and Pair Based Programming.
- Performed Unit testing, Integration Testing, GUI and Web Application testing using Rspec.
- Implemented user interface guidelines and standards throughout the development and maintenance of the website using the HTML, CSS, JavaScript and JQuery.
- Worked on Jenkins continuous integration tool for deployment of project, worked on changes to open stack and AWS to accommodate large-scale data center deployment.
- Used advanced packages like Mock, patch and beautiful soup (b4) to perform Unit Testing. Worked on translation of web pages to different languages as per client requirements.
- Updated the client admin tool to have the new features like support for internalization, support for customer service etc.
- Implemented responsive vector maps and charts on web pages using the data from MongoDB.
- Collaborated with Product Management and User Experience experts regarding product definition, schedule, scope and project-related decisions. Also managed, collaborated and coordinated the work of an offshore development team.
- Worked on rebranding the existing web pages to clients according to the type of deployment.
- Worked on updating the existing clip board to have the new features as per the client requirements. Used many Regular Expressions in order to match the pattern with the existing one.
- Skilled in using collections in Python for manipulating and looping through different user defined objects. Worked with team of developers on Python applications for RISK management.
- Taken part in entire lifecycle of the projects including design, development, and deployment, testing and implementation and support. Improved code reuse and performance by making effective use of various design patterns

• Documented the design solutions and created stories for client requirements.

**Project Sequence 2** 

Vertical

Roles

Project Name : B2B Integration Plat

: E- commerce, Payments

Client : Home Depot USA

**Technology & Tool** : Python, PySpark, Spark SQL, Plotly, Dash, Post Man , Microsoft Azure, Docker, ETL, ML , Statistical Analysis

: Python Developer/Data Scientist

# Detail Project Overview and Workflow:

The Ecommerce reports allow user to analyze purchase activity on user site or app. Customer can see product and transaction information, average order value, ecommerce conversion rate, time to purchase, and other data.

Integrated platform is all-in-one marketing analytics service that merges data from disparate systems, evaluates the performance of advertising campaigns and quickly builds the reports need.

This will allow you to view all of the analytics coming through from the various systems, tools, and integrations that make up user ecommerce experience. When all of user marketing activities are guided by a single data repository, user can better ensure an effective omnichannel experience for every customer and facilitate activation of high-priority marketing strategies.

Three Major functions are :

Capture, store, and organize customer data. Metrics analysis Analyze and make decisions with that data - Customer analytics Task Handled :

- Implemented Data Exploration to analyze patterns and to select features using Python and SciPy.
- Built Factor Analysis and Cluster Analysis Models using Python and SciPy to classify customers into different Target Groups.
- Designed an A/B Experiment for testing the business performance of the new recommendation system.
- Supported MapReduce Programs running on the cluster.
- Evaluated business requirements and prepared detailed specifications that follow project guidelines required to develop written programs.
- Participated in Data Acquisition with Data Engineer team to extract historical and real-time data by using Hadoop-MapReduce and HDFS.
- Communicated and presented default customers profiles along with reports using Python and Tableau, analytical results and strategic implications, to senior management for strategic decision making Developed scripts in Python to automate the customer query addressable system using python which decreased the time for solving the query of the customer by 45%. Collaborated with other functional teams across the Risk and Non-Risk Groups to use standard methodologies and ensure a positive customer experience throughout the customer journey.
- Performed Data Enrichment jobs to deal missing value, to normalize data, and to select features.
- Developed multiple MapReduce jobs in Java for Data Cleaning and Pre-processing, analyzed the partitioned and bucketed data and compute various metrics for reporting.
- Extracted data from Twitter using Java and Twitter API. Parsed JSON formatted twitter data and uploaded to database.
- Developed Hive queries for analysis, and exported the result set from Hive to MySQL using Sqoop after processing the data.
- Created HBase tables to store various data formats of data coming from different portfolios. Worked on improving performance of existing Pig and Hive Queries.
- Created reports and dashboards, by using D3.js and Tableau 9.x, to explain and communicate data insights, significant features, models scores and performance of new recommendation system to both technical and business teams.Utilize SQL, Excel and several Marketing/Web Analytics tools (Google Analytics, Bing Ads, AdWords, AdSense, Criteo, Smartly, SurveyMonkey, and Mailchimp) in order to complete business & marketing analysis and assessment.
- Used Git 2.x for version control with Data Engineer team and Data Scientists colleague. Used Agile methodology and SCRUM process for project developing.
- KT with the client to understand their various Data Management Systems and understanding the data, creating meta-data and data dictionary for the future data use/ data refresh of the same client.
- Structuring the Data Marts to store and organize the customer's data.

- Running SQL scripts, creating indexes, stored procedures for data analysis,Data Lineage methodology for Data Mapping and maintaining data quality.
- Prepared Scripts in Python and Shell for Automation of administration tasks.
- Maintained PL/SQL objects like packages, triggers, procedures etc. Mapping flow of trade cycle data from source to target and documenting the same.
- Performing QA on the data extracted, transformed and exported to excel.
- Participated in all phases of Data Mining; Data Collection, Data Cleaning, Developing Models, Validation, Visualization and performed Gap Analysis.
- Extracted data from HDFS and prepared data for Exploratory Analysis using data Munging.
- Built models using Statistical techniques like Bayesian HMM and Machine Learning Classification Models like XG Boost, SVM, Random Forest. etc.
- A highly immersive Data Science program involving Data Manipulation & Visualization, Web Scraping, Machine Learning, Python programming, SQL, GIT, Unix Commands, NoSQL, MongoDB, Hadoop.
- Used Pandas, Numpy, Seaborn, Scipy, Matplotlib, Scikit-learn, NLTK in Python for developing various Machine Learning Algorithms.
- Worked on different data formats such as JSON, XML and performed machine learning algorithms in Python.

**Project Sequence 3** 

Project Name	: Business Initiated Payments –BIP		
Vertical	: E- Commerce , Payments		
Client	: Home Depot USA		
Technology & Tool	: Python, PySpark, Spark SQL, Plotly, Dash, Postman, Microsoft Azure, Docker, ETL, Machine Learning,		
Statistical Analysis			
Roles	: <mark>Python</mark> Data Scientist		

### **Detail Project Overview and Workflow:**

Business Initiated Payments -BIPis a network used for electronically moving money between bank accounts. This Payment Gateway Solution integrate all your payments along with banking, expense management & accounting - all in ONE online bank account. This Digital Ecommerce Payment Gateway is to approve the transaction process between merchant and customer. It plays a vital role in the online transaction process and authorizes transactions between merchants and customers. Every detail of a transaction can be potentially reported on. From the Virtual Terminal or user which initiated the transaction, to a simplified summary of all transactions - Mohawk Industries has Business Intelligence to streamline existing processes. Reports can be integrated with several accounting packages, or customized if necessary, making reconciliation and financial reporting a breeze. Available in real time and in a variety of formats: CSV, PDF and in XML -Reports can be securely accessed via Pay line, or for corporate clients this solution can automate this service. There is no limit to the size of report which may be generated and all historical merchant data is readily accessible. This payment gateway is a merchant service provided by a E- commerce application service provider that authorizes credit card or direct payments processing for e-businesses, online retailers, bricks and clicks, or traditional brick and mortar. The payment gateway may be provided by a bank to its customers but can be provided by a specialized financial service provider as a separate service, such as a payment service provider. This payment gateway facilitates a payment transaction by the transfer of information between a payment portal (such as a website, mobile phone or interactive voice response service) and the front end processor or acquiring bank.

#### **Task Handled:**

- Implemented Data Exploration to analyze patterns and to select features using Python and SciPy.
- Built Factor Analysis and Cluster Analysis models using Python SciPy to classify customers into different target groups.
- Implemented Data Exploration to analyze patterns and to select features using Python and SciPy.
- Built Factor Analysis and Cluster Analysis models using Python and SciPy to classify customers into different target groups.
- Created HBase Tables to store various data formats of data coming from different portfolios.
- Provided summary statistics of key performance metrics and other measures deemed significant business units.
- Coordinated and managed Data Analytics activities with stakeholders
- Performed Multivariate Analysis, Predictive Modelling, Cluster, Market Basket Analysis using sophisticated statistical techniques.
- Interpreted & translated analytic output into insights.

- Determined the source of the data, coordinate extraction and acquisition.
- Worked with brands and business units to ensure that all consumer and behavioral data is stored in a Centralized Enterprise Repository using Amazon Web Services, Redshift and C3.
- Assess data quality, identify gaps in the data and eliminate irrelevant data.

**Project Sequence 4** 

Project Name: Auto Intensity Control System AICSVertical: SemiconductorClient: Civil Aviation Authority of Norway, NorwayTechnology & Tool : C/C++, Design Patterns, SQL, Python, bash, ksh, Linux, POSIX Threads, SVN, git, GitHub, OOAD, BOOSTlibraries, gdb, pdb, dbx, OpenGrok, Jira.Roles: Embedded Programmer

## Detail Project Overview and Workflow:

This is a simple circuit that automatically controls the intensity of street lights which is designed using microcontroller and LEDs. This article describes about the circuit that switches the street lights on detecting vehicle movement and remains off after fixed time. This system controls the street lights using light dependent resistor and PIR sensor.

## Task Handled:

- Responsible to develop an implementation of an order Management system to accept orders from UI, Fix, send/route to Exchanges and other broker dealers and fill the trades in C++ on Unix and Linux platforms.
- Developed a multithreaded cache offline program in C++, supporting various user interfaces to deliver/process data for scalable, low latency applications.
- To store data on order history, accounts, securities, etc. have extensively used STL for fast retrieval and update.
- Experience with serial communications including RS232, RS485, I2C, SPI and I2S.
- Good experience in 8/16/32 bit controller based h/w, design, testing and troubleshooting.
- Developed SOAP web services for order and trade related information to display on UI. Used proprietary MQ to subscribe to order and trade updates.
- Using Bloomberg toolkit to gather data about various securities using BPIPE. Have coded various Python scripts to fetch this data for various reports.
- Used various data structures and design patterns in applications like Singleton, Observer, Factory methods etc.
- Implemented unit tests using Python, C++ in Google test framework, Squish test in python to automate the GUI testing.
- Used a C++ interface to retrieve data from the data base or to update data in the data base.
- Have written many SQL stored procedures for data manipulation and to compute several metrics like gain or loss, realized or unrealized etc.
- Used Python scripts to generate various reports like OATS, P&L, transaction history, user privileges, limit rules and commission schedule reports.
- Used SVN and git/GitHub for source code control.
- Followed Agile and Scrum Methodologies.

## **Personal Details**

- Father name :- Subhash Kendre
- Mother name :- Chandrakala Subhash Kendre
- Current address :- At Dhawadi , Post Adas Tq Ambajogai Dist:Beed
- Pin code: 421517
- Date of birth :- 07/01/1991
- Marital status :- Married
- Language :- Marathi , Hindi , English,

# **Declaration:-**

I hereby declare that the above-mentioned information is correct to the best of my knowledge.

Location:

Regards: Mahesh Subhashrao Kendre