**Vignesh K Data Architect**

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**Experience Summary**

An self-motivated professional with 6+ years of experience in software industry with exposure across various business processes including all phases of Software Development Life Cycle, Product consulting, Software consulting, Operations management and domain analysis.

* Handled a team of 4+ programmers across platforms
* Designed algorithm and implemented to automate many manual process which in turn increased productivity, reduced the number of members used, increased the quality of the output.
* Having experience in Machine Learning and have used algorithms like SVM, SGD, random forest, decision tree etc.,
* Having experience in Deep Learning techniques like CNN, RNN, LSTM.
* Having experience with programming language Python and JAVA.
* Having experience on AWS and Azure services/platforms.
* Having real time experience on search engine technologies like Elastic search and Solr.
* Having hands on experience over relational databases - SQL Server and No-SQL databases.

**Work Experience**

**July 2019 – Present as Data Architect**

Organization : Mobius Knowledge Services Pvt. Ltd, Chennai

Period : 1 year and 2 Months

**Responsibilities**

* Handling ML team and ML projects.
* Designing and implementing complete end to end workflow.
* Exploring and reviewing new technologies and implement the same in projects as required
* Client Communication. Interacting with client and explaining current status and road map.
* Analyzing data sources, cleansing them and getting and providing the information.

**July 2016 – Present as Senior Data Analyst**

Organization : Mobius Knowledge Services Pvt. Ltd, Chennai

Period : 3 year and a Month

**Responsibilities**

* Handled large volume of data and did analytics to get insight from them.
* Providing ML solutions for image and text based problem.
* Worked in Hadoop platform using AWS environment and delivered the output before TAT
* Designed and maintain reference architecture for most of the projects.
* Created ML OCR solution to extract text from image document.
* Created ML solution for classifying categories for e-commerce products.

**June 2014 to June 2016 as Data Analyst**

Organization : Mobius Knowledge Services Pvt. Ltd, Chennai

Period : 2 years and a month

**Responsibilities**

* Using Airflow for scheduling workflow.
* Identified process for extracting details from AJAX based web pages.
* Manipulating, cleansing & processing data using Python, MongoDB and SQL
* Also been in the part of all phases of Software Development Life Cycle in real time projects.
* Conducted research to collect and assemble data for databases – Was responsible for design/development of relational databases for collecting data.

**Major Achievements**

* Awarded “Star of the Quarter” for Implementing ML for E-Commerce Product Category classification.
* Awarded “Best Performer of the month” for learning Mongo DB in a month time and to have implemented in a project.
* Awarded “Helicopter Shot” for Implementing ML for HTS Code classification.
* Created document database using Elasticsearch for storing documents and retrieving them based on content relevance and tags. Please find the [blog](https://blog.mobiusdata.com/building-unstructured-data-management-solution-with-elasticsearch-and-aws/) created by me for the same. I was also awarded **Timely Solution Award** for the same.
* Indexed 10TB of data in to elastic search for creating our own search engine.

**Major projects handled**

1. **Product Category Classification:**

**Programming Language:** Python **Modules:** NLTK, scikit-learn, tensorflow, pandas, AWS Sagemaker

* + To classify products to their respective category using text classification and image classification.
  + Used python along with Pandas and Scikit Learn to process and classify the products used random forest algorithm for better accuracy along with CNN for image classification.

1. **HTS classification:**

**Programming Language:** Python **Modules:** Spacy, scikit-learn, pandas, Azure ML studio

* + To classify input Cargo to its corresponding HTS code using text classification.
  + Used python along with Pandas and Scikit Learn to process and classify the input text. Used Hierarchical Text Classification method since we had 10,000+ classes

1. **Captcha Reader:**

**Programming Language:** Python **Modules:** tensorflow, opencv, Tesseract, Azure Vision API

* + To create a ML solution which process both image and handwritten image Captcha to extract text from them.
  + Used python along with OCR software like Tesseract and Azure platform, used noise reduction and segmentation to improve the OCR process.

1. **Enterprise Document management database:**

**Programming Language:** Python **DB**:Elasticsearch

* + To create a document database where we can store documents like PDFs, excel, PPTs etc.,. and retrieve them based on relevance and tags.
  + Used Elasticsearch along with parent-child relationship to store document and retrieve them.

1. **Common Crawl Search Engine:**

**Programming Language:** Python **DB**:Elasticsearch **Platform:** AWS EMR

* + To ingest 10 TB of Raw web page texts from Common crawl repository and index them in Elastic search.
  + Used python, EMR Hadoop and Elastic Search to extract the Common Crawl repository and index them into Elastic search to query from.

**Educational Background**

**Graduation**

Completed Bachelor of Engineering (Electrical and Electronics) (2011 – 2014) from SSNCE, Tamil Nadu with an overall percentage of 70

**Diploma**

Completed Diploma in Electronics and Communication (2008 – 2011 from CNPT, Tamil Nadu with an overall percentage of 91

**SSLC**

Completed SSLC from Santhome Higher secondary School in 2008 with an overall percentage of 86

**Technical skills**

* Python and Machine Learning.
* Elastic search, TSQL, Mongo DB, Postgresql.
* AWS Cloud computing, EMR, Sagemaker and Hadoop.
* Azure ML studio, Data Lake.

Place : Chennai yours sincerely,

Date : (Vignesh K)