Lokesh Vairamuthu

Data Scientist - XYPHER PTE LTD

- Email me on Indeed: http://www.indeed.com/r/Lokesh-Vairamuthu/ced538202b1e7abb

BACKGROUND:
I'm an enthusiastic and energetic Data scientist with more than 3 years of experience in the Data Science field worked at one of the
world's leading automobile manufacturers and Block-Chain Driven Analytics solution firm. I have immense experience in Deep
Learning, CNN, RNN, LSTM, OpenCV, Artificial Intelligence, Machine Learning algorithms, Statistics and Probability, Visualization
using Tableau, Dashboard interactive model in R and Python. With vast experience in Data science, modelling and its business-
oriented application, I am very much motivated to contribute into business propulsion into the future.

Work Experience

Data Scientist

XYPHER PTE LTD - Singapore
July 2019 to Present

Responsible for building interactive machine learning models on website using various web developing and machine learning models. Initialized the collaborative technique of combining DBMS and Machine Learning approaches such as customer profiling, Advanced Recommendation Engines,
Narrow-band forecasting models for various clients.
Responsibilities:
• Building advanced Machine Learning models using Scikit-learn and TensorFlow for clients related to Recommendation Engines,
Forecasting Models, Predictive and Complex clustering of customers for the clients.
• Initiated the collaborative technique for combining the DBMS server data with Machine Learning models and made it dynamic with constant updates in the database.
• Developed advanced recommendation engines using the Autoencoding technique from deep learning method to achieve complex yet highly accurate recommenders for the customers and the clients.
Accomplishments:
• Successfully built a highly meaningful replication of WhatsApp's successor word recommender for a semi-automated chatbot
developed for answering the queries of the clients.
• Successfully built the first DBMS-Machine Learning model in the firm making the model highly dynamic with constant updation in the database, achieving the accuracy of recommender system built from RMSE - 14.35 to 8.5 in a month.
• Deployed the first deep learning recommender and forecasting models in the firm and its under test run to the clients.
Technology Stack:
• Python, SQL, R, Tableau, HTML, CSS

Project (Student)

SINGAPORE MANAGEMENT UNIVERSITY - Singapore

January 2018 to April 2019

Machine Learning - Developed feature engineering, regression and classification models for extracting the top 10 best home
features to be availed by Airbnb listings in 6 United States cities. Using multiple feature engineering methods, we extracted the top
10 features for the predicting price of a new Airbnb listing and predicting the expected ratings of a new Airbnb listings. github
• Text Analytics - Developed a model for suggesting the best mobile phones to the customer between Apple and Samsung models
(the chosen brands for the project), based on the customer's requirement on price, features, adaptability etc. The model was built
based on the insights from the clustering technique, feature selection of text reviews, topic modelling from millions of reviews into insightful suggestion.
• Applied Statistical Modelling - Predicted the chance of an applicant getting his Visa approved for United States using predictive
analysis and R Studio. The data is gathered from Kaggle and applied the logistic regression to
predict the chance of getting visa or not from the different variables, Country origin, purpose of visit, organization to work with etc.

Personal Prep Project - Deep Learning (Student)
• Health Care_Skin Cancer Detection - Developed a Convolutional Neural Network algorithm to detect the age, gender, location and severity of cancer for the sample patients. Acquired an accuracy of 91% on an average for the all the classification model. github
• Face Recognition_Deep Learning Classification - Developed a deep learning convolution network classification model to correctly
predict the name of the person in the dataset with 82% accuracy. github
• HealthCare_Diabetes Detection Algorithm - Created a Deep Learning model to detect the presence of diabetes to a patient from several factors and acquired an accuracy of 80%. github
• Complete Classification Analysis_Machine Learning _Deep Learning - Predicted the type of spare parts present for a given Lego
model (target variable - 2) and predicted with all the different classification models in machine learning and acquired an accuracy of 99%. github
• Multiclass_Image Classification_Convolutional Neural Network Analysis - Developed a model to classify precisely Multiple class
dataset with 8 different sectors of images using the Deep Convolution Neural Network and finally fitting the model with 99%
accuracy. github
• Rolls-Royce Data Innovation Challenge - Created a Deep visual analysis on the precise cause for the block-in and block-out at different airports in the world, thereby targeting the features to improve the operational efficiency of aircraft industry. github
• Statistical Visual Analysis of Students performance in courses - Established a detail statistic visualization on the performance of different students in the various courses offered at the school. github
• Supply Chain Demand Forecasting_Deep Learning - Initially modelled a complicated multilinear regression model featuring a
score of 0.2%, while improvising on the model immediately improved the score to 48%, an increase of 2500%. github

• Car Price Predictive Model_Deep Neural Network - Initially modelled a complicated Deep Neural Network regression model
featuring a score of 52%, while improvising on the model by increasing the initial hidden layer node more than the input features,
immediately improved the score to 98%, an increase of almost 100%. github
• Automobile Image Classification_Convolutional Neural Network - Created a Convolutional Neural Network for Image recognition of cars and accurately classified the images by the model with 97% accuracy score. github
• Sign Language Analytics_Image Recognition_Convolutional Neural Network - Created two models with sign language
classification, on with Machine Learning technique featured an accuracy of 90%, while the other with CNN model, featured an accuracy of 94%. github
• Astronomical Deep Learning Analytics_Volcano Classification in Venus - Established 2 different models to predict the presence of volcanos, type of volcano with each evaluated to give 99%, 88% accuracy in predicting the volcanoes in Venus. github
• Natural Language Processing_Sentiment Analysis - Developed an NLP model to predict the sentiment of various tweets about car
model in Asian region and acquired an accuracy of 89%.
• Speech Recognition using PyAudio - Developed a Speech Recognizer to predict the words spoken by different people and acquired an accuracy of 98% using the Deep Neural Network model.

Digital Marketing - Data Scientist Intern

ZENO GROUP - Singapore
May 2018 to November 2018

Responsible for web scrapping of unstructured data and social analysis of various contents / campaigns as requested by the clients and providing with meaningful business insights to the clients using various NLP and machine learning models.
Responsibilities:
• Understanding the business model of clients and analysing the market campaigns using Google Analytics and NLP techniques on other social media conversations, suggesting the target domain in campaign to increase the market penetration and behavioural
analytics on respective campaigns.
• Practically implemented different NLP techniques such as the tokenization, word stemming, clustering, sentiment analysis etc,
word cloud, word clusters from the licensed social media using Python for featuring the market and customer analysis.
• Closely work with PR team, Creative team and Digital team to launch a marketing strategy for the client to implement for achieving
successful business growth.
Accomplishments:
• Successfully completed 20 different customer analytics projects in 4 months, each generated a revenue of few thousand Singapore
dollars to the organization, first ever since the start of the business.
• Successfully designed a predictive machine learning model to find the winner of FIFA 2018 world Cup and predicted the result with an accuracy of the 80%.
• Developed the most rightful business model to a world-famous luxury car maker, which was highly recognized by their
management, signing up a new contract to proceed for further analysis from ZENO.

• Led the social analytics project on more than 15 different industries in the APAC region in 4 months.
• Spear-headed the business analytics projects for various industries in plotting the potential growth of business based on customer
conversation.
• Custom coded the web extraction of news articles from News whip website using its API in Python for gathering the customer
voice of different topics to gather the interaction velocity, domain pioneer.
Technology Stack:
• Python, R, Tableau

Global Sales Strategist & Afro-Asia Market Business Analyst

DAIMLER INDIA COMMERCIAL VEHICLES PVT LTD
July 2016 to May 2017

Responsible for finding the most influential parameters influencing the sales of the organization over different markets using various machine
learning models, targeting to have double digit growth of sales and market share. Led the African, MENA and South Asian Emerging Markets launch,
sustainability and improvement of business for Daimler Trucks Asia.
Accomplishments:
• Headed the sales of parts for all the markets across the globe, managed 100 colleagues amongst Japan, German, Latina and
African markets.
• Increased the sales by 44% for the most critical 32 parts in SriLankan market, by implementing the gradient boosting
technique. Taking into consideration the sales history, demography, mode of vehicle operation, customer susceptance of all the 13,000 unique serviceable parts.
• Increased the sales by an average of 30% for the African market, by modelling the revenue for the sales history, demography,
customer engagement, price of product and customer feedback.
• Established a new dealer successfully in Bangladesh, by negotiating MoU on Logistics, financial setup, inventory declaration and
NDA with Daimler Trucks Asia, with the help of MBA techniques.
Technology Stack:
• Python, Spreadsheet Macros, SAP, Tableau

DAIMLER INDIA COMMERCIAL VEHICLES PVT LTD
June 2014 to May 2017

Supply Chain & Logistics Specialist

DAIMLER INDIA COMMERCIAL VEHICLES PVT LTD
June 2014 to June 2016

Responsible for predicting, planning, procuring, inventory managing and complete supply chain management by developing different machine
learning models for non-production materials. Implemented the organizations first optimized parts catalogue that serves the benchmark for the future works of product's supply chain at Daimler and Supplier end.
Accomplishments:

• Initiated, designed and formulated packing codes for materials; assured foolproof efficient packaging for parts.
• From the insights of the model for price reduction, we saved S$0.3 Million a year in overhead cost, by changing the packaging from wood to high strength carton boxes.
• With the most complicative regression and time series models, we administered JIT concept with all the packing materials
supplier. Implemented low price materials from new supplier.
• Spear-headed Inventory turnover ratio as 5.7 for the Non-Production materials per month; increased the usable space in the warehouse from 67% to 77%, in turn increased the total sales by 3%.
• Managed 100 employees in the logistics team from in-warding of parts, material storage, dispatch packaging, dispatching, third
-party logistics management and proper system control of all, using SAP module.
Technology Stack:
• Python, SAP, Spreadsheet.

Education

Master of IT in Business
SINGAPORE MANAGEMENT UNIVERSITY - Singapore
January 2018 to April 2019

Bachelor of Engineering in Mechanical Engineering
PSG COLLEGE OF TECHNOLOGY
June 2010 to May 2014

Skills

PYTHON (3 years), SQL (1 year), JAVA (1 year), C++ (Less than 1 year), TEACHING (Less than 1 year)

Links

http://linkedin.com/in/lokeshvm

http://www.github.com/LokeshV27

Additional Information

• Data Structures & Algorithm Design.
• Statistical approach of Machine learning model development.
• Competent in developing business-oriented data science application.
• Able to pull out meaningful insights from unstructured database.
• Proficient in Deep Learning applications and visualization of insights.
• Neural Network Expert.

ADDITIONAL SKILLS

• Technical Skills: Python, R, SQL, Tableau, Java, Java Script, C++, HTML, CSS, Golang, Google Analytics.
• Teaching Association: Worked as the Teaching Assistant for one of the most rated Analytics course in Singapore Management
University, "The Analytics Framework and Business Context", under the well dignified professor Mr. Venkat Narayanan.
• Language fluency: English, Tamil.