Karthick Raja S

https://karthickrajas.github.io

Email: karthickraja@iisc.ac.in

Ph.: +91 8220759329

Education

Year	Degree	Institute/ School	%/ CGPA	Distinction
2017-2019	M.Mgmt.	IISc., Bangalore	7.9	-
2011-2015	B.E (Civil Engineering)	TCE, Madurai	9.2	Among Top 5 Students in the batch
2010-2011	Class XII	Dolphin School	92.92	3rd Place in the Institution

Academic Achievements

		YEAR
Awards and Recognitions	▪ Won GE DnA Hackathon and was awarded with cash prize of 1000 USD.	2018
	▪ Awarded 1st prize on Paper presentation at MS Ramaiah Institute of Management – Data Modelling and Microtargeting of Voters for Election Campaigns	2018
	▪ Presented paper on "Experiment study on Hot Rolled Square Hollow sections" in IJMCC.	2015
Work Accolades	▪ "ILP Kudos", Award for Meritorious People in the training for Business Intelligence, TCS	2017
	▪ Diploma certification in Business Analysis, International Institute of Business Analysis and TCS	2017

Internship Experience

GE Digital, Bangalore		Apr'18 - July'18
Contractor Document Assessment RNN/LSTM	▪ Build a digital tool with "Cognitive Intelligence" embedded in it for assessing LOTO documents ▪ The model classifies different part of the document under different criteria with a probability score ▪ Built a text summarizer to summarize the tagged paragraph to support the probability score ▪ Approximately saves a Million dollar per year and enhances compliance of the GE EHS team	
Worker's Compensation of EHS	▪ Identification of significant drivers of the expenditure on Medical, Indemnity and other cost ▪ Estimate the dollar impact of each significant driver and Recommend action plan to reduce overall cost ▪ Expecting at least a 5% reduction in claim cost per year and improved safe work environment.	
Image Classification CNN	▪ Classification of Thermal, Wind and Solar power plant based on the Collection of Aerial pictures ▪ Trained a CNN model for the classification of power plant images with batch normalisation ▪ Suggested an unsupervised technique for clustering to differentiate Barren lands from power plants	
DnA Hackathon Python	▪ Determining price related actions for GE Renewable products to maximize the contribution margin. ▪ Identifying the impact of customer discounts on sales at part level and master customer level ▪ Differentiate the products based on the price elasticity and recommendation for change in price ▪ Recommendation provided is expected to save 15 million dollars approximately for IP and Non-IP parts	

Work Experience

Tata Consultancy Services		Jun'15 - Jul'17
Trainee – Business Intelligence (Jun '15 – May '15)	▪ Created and Optimized processes to import, retrieve and analyse data for a MNC Retail Client. ▪ Worked on complex mappings, mapplets and workflow to meet the business needs ensured they are reusable transformation to avoid duplications. ▪ Worked on Business Objects reporting tool for Business reporting, Ad-Hoc Dashboards setup. Tools: **Informatica PowerCenter 9.x**, Databases: **Oracle 12C**, **Teradata**, Languages: **SQL, Unix, C++**	
Media Research – Business Analyst (Jun '16 – Jun '17)	▪ Planned advertising campaign for different channels in different geographic locations. ▪ Analysed different Target profiles based on Demographic, Geographic and Socio-Economic Factors. ▪ Expertise in Multi-Market Comparison, Trend analysis, Series and Competitions, Exclusivity and Duplication of Viewership, similar Viewing Behaviour Analysis and Forecasting.	

Technical Expertise:

Mathematical and Statistical Modelling		Jun'17 – tillnow
Regression, Time Series and Advanced Analytics: Python, R	▪ Performing EDA, Data cleansing & Transformation to arrive at a preliminary idea on the variables. ▪ Used Lasso and Ridge Shrinkage methods for Variable Selection and replacing Collinear Variables. ▪ Model Selection using AIC, BIC, Forward Selection and Backward Elimination Methods. ▪ Residual analysis and Model Diagnosis followed by Cross validation and Prediction for test data. ▪ Studied performance of ARIMA, SARIMA and ARMA models. ▪ Classification using Logistic regression, Decision trees and Bagging algorithms for credit score dataset. ▪ Developed Parametric and Non-Parametric Survival Models, Cox Regression and Regression Trees.	
Quantitative Finance: Derivatives and Risk Management: Python, Quantlib	▪ Worked on Bootstrapping algorithm for developing Zero Rate Curves using different interpolation schemes and Pricing back the market instruments. ▪ Performed Option Pricing using Monte Carlo Simulations and Heston Model for European Options. ▪ Analyse Portfolio using Monte Carlo Simulations and convex optimization.	
Data Mining and Decision Models	▪ Discrete Event simulation with Simpy, Multi objective optimization and Goal programming ▪ Data Envelopment analysis with constant return to scale (CCR) and variable returns to scale (BCC) model ▪ Data mining algorithms in MapReduce frame work – Apriori and Eclat algorithm. ▪ Deep learning – CNN, RNN, LSTM – Image processing and Natural language processing.	

Extra-Curricular Activities

		YEAR
Society	▪ Analytical Society of India, IIM, Bangalore – Active Member	2018
	▪ Campus Ambassador for Analytics Vidhya	2018
Data Science Platforms	▪ Tech-gig Philips Data Science Hackathon (on-going) selected in top 90 teams from 1270 teams.	2018
	▪ Goldman Sachs, Code sprint - Prediction score of 979.6 / 1000. [Hacker Rank]	2018
	▪ Worked on the House Price Prediction and Built Two Layer Stacked Model [Kaggle]	2018