Geethasri Ramkumar

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TECHNICAL SKILLS

Languages	Python, R
Frameworks/Tools	Git, SQL, OpenCV, Docker, AWS-S3, Kubernetes, garden.io, SVN, Hadoop, Spark, Sqoop, Hive, Tableau, Google Analytics
ML Algorithms	PCA, SVM, Decision Tree, Random Forest, KNN, K-means
DL Architectures	MLP**,** CNN, Auto-encoders,
Libraries	Scikit-learn, TensorFlow, Keras, pandas, Matplotlib, NumPy, Scipy, Nltk, spacy

EDUCATION

Hochschule für Technik Stuttgart, Stuttgart, Germany **March 2017 – Feb 2019**
Master of Science in Software Technology

Anna University, Chennai, India **Aug 2008 – May 2012**
Bachelor of Electronics and Instrumentation Engineering

EXPERIENCE

Diconium Data Gmbh - Volkswagen Group, Stuttgart, Germany **Feb 2020- Oct 2021**
Job title: Data Scientist

- Developed a **similarity-based recommendation model** in **python** that suggests cars that are closer to the user-selected cars to improve the customer experience for Volkswagen resulting in a 5% increase in revenue during the first month of the model release.
- Developed a **logistic regression model** in **python** to predict the effectiveness of vehicle financing offer with respect to the user and extracted the contributing factors resulting in improved customer response rate and loan availing conversion with the bank.
- Created S3 buckets using terraform for data storage as part of infrastructure migration on **AWS**.
- Performed data analysis and visualizations to derive insights and monitor users, and products of a manufacturer using the **Mapp Intelligence tool.**

Mercedes-Benz Consulting GmbH, Stuttgart, Germany **April 2019-Dec 2019**
Job title: Consultant - AI & Advanced Analytics

- Trained an **MLP model** in **python** to predict the turbocharger speed in engines for Daimler trucks. The resultant model was used to mimic the turbocharger environment and use it for performing their tests. As a result, the wait times at the test bench were reduced by 17%, and also the risk of engine wear due to frequent testing in physical engines.
- Performed data assessment to build spell check assistant (**NLP**) for Mercedes-Benz customer assistance center using spacy, nltk in **python** This helped our client to decide whether they required a customized spell check assistant for their email system.

Mercedes-Benz Consulting GmbH, Stuttgart, Germany **July 2018 – January 2019**
Job title: Data Science Intern (Master Thesis)
Thesis topic: "Conception of a model to predict future developments in the Customer Satisfaction Index (CSI)"

- Extracted data from the **PostgreSQL** database.
- Reduced dimensionality of the features using neural network-based **Autoencoder**.
- Trained two separate models, one with **deep neural networks** and the other with **random forest** in **R** to predict the customer satisfaction index of luxury cars.
- Presented the results and suggestions to improve CSI, based on analysis of the results.
- As a result, the company could identify its position among its competitors and enhance its marketing process.

Robert Bosch power tools GmbH, Stuttgart, Germany **March 2018 – May 2018**
Job title: Data Science Intern

- Migrated data from Bosch power Tools relational databases to **Hadoop Distributed File System (HDFS)** using **Sqoop** for advanced data analytics.
- Automated the migration process using Crontab and **Python** scripts.
- Predicted the intra-month demand for Bosch power tools using **Deep Neural networks, HDFS, Spark, scikit-learn, and Hive.**
- Developed a second model using **Keras** with the same data and features.
- The prediction results were used for future production planning to replace the current prediction methods.

- Presented the results portraying the advantage of the Hadoop ecosystem for advanced analytics over relational database systems.

Hochschule für Technik Stuttgart, Stuttgart, Germany **March 2018 – July 2018**
Job title: Teaching Assistant

- Developed projects with **neural networks** using **Keras** with open-source data sets.
- Presented the projects during lab sessions for teaching purposes, portraying the pipeline of a machine learning process

HCL Technologies Ltd., Chennai**,** India
Job title: Software Developer **January 2014 - June 2016**

- Developed software using **c++** and maintained an AVCS application based on the standard DO-178B for Lord corporation, USA to suppress the vibrations in the cockpit of choppers.
- Created test plans and test scenarios according to the requirements using the LDRA test tool. As a result, the vibrations in the cockpit were reduced by 20%.
- Built a **logistic regression model** in **python** as a proof of concept to classify low/high-risk *customers and predicted the likelihood that a* customer fails to pay the due in order to prioritize and optimize the due collection process.
- Predicted customer sentiments from emails as a proof of concept for overall customer experience evaluation on a periodic basis using a **logistic regression model** in **python**.

Amazon Development Center, Chennai**,** India
Job title: Retail Associate **April 2013 - January 2014**

- Calculated costs and analyzed prices with different internal tools and MS Excel.
- Did deep dives on the competitive study and created shortcuts by reducing the manual resource using **python**.

CERTIFICATIONS AND ACTIVITIES

- Certification in "Deep Learning & Neural Networks" conducted by Prof. Andrew Ng (Stanford University, USA) and NVIDIA Deep Learning Institute.
- Certification in "Building a Recommendation System with Python Machine Learning & AI" at Lynda.com
- Student commission representative for M.Sc. Software Technology at Hochschule für Technik Stuttgart.
- Member of organizing committee for intercultural training at Hochschule für Technik Stuttgart.
- Certified SAFe practitioner.

SPOKEN LANGUAGES

Languages English(Full professional proficiency)**,** German (Limited working proficiency)