KRISHNA MURALI

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LinkedIn | Github

TECHNICAL SKILLS

Programming Languages: SQL, Python, R, C#

Statistics: Regression, ANOVA, Multivariate and Longitudinal Statistics, Hypothesis Testing, Experimental Design

Machine Learning: Clustering, Binary and Multiclass Classification

Cloud: AWS

Big Data: Hadoop, Spark, Hive

Deep Learning Frameworks: Tensorflow, Keras

PROFESSIONAL CERTIFICATIONS

AWS Certified Solutions Architect – Associate ***Aug '20***

Training and Certification in SQL – by Stanford Lagunita ***Sep '16***

PROFESSIONAL EXPERIENCE

Factory Automation Software Developer – John Deere ***Aug '19 - Present***

- Awarded research assistantship and grants from North Carolina State University and John Deere
- Analyzed data from PLC controllers and sensors
- Efficient control of shop floor quality process flow by developing a centralized MES built on C# and MS SQL Server from the analyzed data
- Developed a Tableau dashboard that gives insights on the Quality Audit process done on 100 machines manufactured each day

Associate Data Scientist – LatentView Analytics Pvt. Ltd., Chennai, India ***Dec '17 – July '19***

- Provisioned Data Lake solution for the largest food logistics company in the United States
- Constructed scalable ETL pipelines using SparkSQL and EMR clusters to process the consolidated table with 250 dimensions and 40 business metrics and facilitate the guided ad-hoc interface
- Developed an interface on top of the data lake to generate SQL queries from JSON input, using Python, for business analysts to churn out reports
- Developed another interface for implementing common ML algorithms through Zeppelin notebooks fetching specific datasets from the data lake
- Recommendation engine which predicts Cuisine type based on previous transactions of customers using Spark MLLib
- Implemented a classification algorithm on providing deals to the customers based on previous transactions
- Provisioning EMR analytics workloads from data lake in S3
- Analyzing the data present in data lake using Glue, Athena, and RS Spectrum

Systems Engineer – Infosys Ltd., Mysore, India ***Mar '17 – Dec '17***

- Constructed denormalized tables in MSSQL server to facilitate business analytics of a Fortune 500 client
- Developed a tableau dashboard to track the user query performance

EDUCATION

Master's in Integrated Manufacturing Systems Engineering – Minor in Statistics - **North Carolina State University, Raleigh NC** ***GPA: 4/4 Aug '19 – May '21 (Expected)***

Bachelor's in Manufacturing Engineering - **College of Engineering, Guindy, Chennai, India** ***GPA: 7.95/10 May '16***

ACADEMIC PROJECTS

- ***Deep Neural Network Architectures for defect detection*** ***Feb '20 – Mar '20***
    - Detecting defects on textured surfaces using Image segmentation to detect the pixels where the defect occurs in the given image. Implemented approach of U-Net Convolutional networks paper.
- ***Portfolio Analysis using Non-Linear programming methods*** ***Nov '19 – Dec '19***
    - Implemented various non-linear programming methods to compute minimum of a function in Python. Chose Cauchy's method of steepest descent and exterior penalty method to construct the optimum portfolio balancing max returns and volatility.