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Sudharshan Krishnakumar

❯❯ I like to build intelligent components that could be re-used and scaled. ❮❮

❯ Status: Staff Big Data Engineer, Masters in Computer Science

❯ Stack: Kafka, Spark, Spark Streaming, Spark on Kubernetes,

❯ Languages: Java, Scala, Python, Shell Scripting, R

❯ Tools: IntelliJ, PyCharm, Git, Ansible, Jenkins

EXPERIENCE

Visa - Staff Software Engineer (Realtime Data Processing)   2020 - now

❯ **Roles & Responsibilities:**
1. To lead and steer the platform level initiative assosciated to the core pipeline.
2. To improve the supportability of the existing realtime pipeline.

❯ **Contributions:**
1. Refactoring of the code and segregating it into separate modules based on functionality.
2. Improved the performance of the realtime pipeline by fine tuning its processing.
3. POC on pluggable transformations that could be serialized as a json.

Visa - Staff Software Engineer (Data Localization & Scaas Onboarding)   2018 - 2019

❯ **Roles & Responsibilities:**
1. To deliver multiple batch pipeline for the localization initiatives.
2. To execute multiple applications with several datasets on the Scaas Framework

❯ **Contributions:**
1. Enabled the single click deployment with regional configuration support.
2. Enabled the Spark pipeline on kubernetes for compute intensive tasks using generic module.

Visa - Sr Software Engineer (Hadoop Transformation)   2015 - 2018

❯ **Roles & Responsibilities:**
1. To build a new core batch pipeline on the spark framework.

❯ **Contributions:**
1. Developed generic frameworks to enable transformation towards Hadoop and spark ecosystem.
2. Built migration tools like Dataset comparator, Reference Analyzer for speedy migration.

Persistent - Sr Software Engineer (Breach prediction & Connector Development)   2011 - 2013

❯ **Roles & Responsibilities:**
1. Built UI tool to present SLA breach prediction of service ticket to the call center dispatchers.
2. To build connectors for different platform (CRM, ERP and Social platforms)

❯ **Contributions:**
1. Built generic parsing module to parse responses (XML,JSON,CSV) and generate relational data.
2. Developed code in java for testing data from PMML to remove the dependency on expensive toolkit.

PROJECTS

Airline Management - AWS Solidity (IIT Madras)   2021 - 2022

❱ Automation of setting up private ethereum network on AWS EC2 cloud instances.

❱ Implementation of airline reservation system on the private ethereum network.

NSDC Insight - R-Shiny Dashboard (Univerity of Chicago)   2018 - 2019

❱ Built a R Shiny UI app for preprocessing, visualizaiion and prediction on NSDC dataset.

❱ A user friendly control to upload dataset, pre-process and and execute a predefined classifiers.

Automatic video annotation - sudhargk/video-annotator (IIT Madras)   2014 - 2015

❱ Designing algorithms for extracting the semantic events in the video using deep learning.

❱ Generating the annotation by studying the co-occurrence of events and objects in a given time frame.

Deep Neural Net Toolbox - iitm-donlab/python-dnn (IIT Madras)   2014

❱ Built a python tool-kit for deep learning algorithms using the python theano library.

❱ Provides easy configuration for new dataset, supports most of the variations in deep learning literature.

Spotting of optimal business location - sudhargk/datamining (IIT Madras)   2014

❱ Designed a machine learning solution to identify the desired location using social networking data.

❱ Implemented multiple regression techniques and achieved 81 percent accuracy on cross-validation.

CERTIFICATIONS

Advanced Certification for Cloud, Blockchain and IoT (IIT Madras)   2021 - 2022

❱ Implemented course project using MQTT, AWS component viz. Dynamo DB, Kinesis, SNS.

❱ Advance concepts on distributed system processing and core concepts of blockchain

Post Graduate in Data Science and Machine Learning (Univerity of Chicago)   2018 - 2019

❱ Learnt Data Understanding and Preparation, Analytics with R, Adavacnce Analytics and Machine Learning.

❱ Built a R Shiny UI app for preprocessing, visualizaiion and prediction on NSDC dataset.

Other interests - listen to classical music, reading biographiesa & research papers.

EDUCATION

Program	Institution	CGPA/Percent	Year of Completion
Master of Technology	Indian Institute of Technology, Madras	9.6	2015
Bachelor of Engineering	MES College of Engineering, Pune	75.8%	2011
XIIth Std. (CBSE)	Kendriya Vidyalaya Ganeshkhind, Pune	90.2%	2007
Xth Std. (CBSE)	Kendriya Vidyalaya Ganeshkhind, Pune	83.8%	2005