

Nisha Mariyal Radhakrishnan

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EDUCATION

Master's in Computer Science & Applications, **Virginia Tech, USA** (GPA: 4.0/4.0)
B. Tech, Computer Science, **SRM Institute of Science & Technology** (CGPA: 9.57/10.0)

Aug 2021- Present
July 2015 – May 2019

TECHNICAL SKILLS

Languages: C, C++, Python, Shell scripting	Big Data: HDFS, Hive, Dremio, Tableau
DBMS: MySQL, PostgreSQL, HQL	Others: AutoSys, Jenkins, Bitbucket, Unity, Ansible Tower, Confluence, Rally Agile, Redis
Certifications: AWS Certified Cloud Practitioner (Nov 2020), Certified SAFe 4 Practitioner (Dec 2019)	

PUBLICATIONS

Traffic Signal Detection and Pre-Emption, *International Journal of Research and Analytical Reviews (IJRAR)*, E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.6, Issue 2, PP.944-956, June 2019.

- Traffic signal detection using Image Processing Algorithms - **YOLOv3 Object detection algorithm** and **Edge Detection**
- Traffic signal preemption implemented using Arduino Uno microcontroller and **ZigBee** module

PROFESSIONAL EXPERIENCE

Software Engineer/Analyst, Transunion Global Technology Center LLP

Aug 2019 – Aug 2021

- Worked with TransUnion's regional teams in customer credit data analysis, data processing and in creating insightful reports.
- Worked on TransUnion's multi-terabyte analytics platform - Shared Analytical Processing Environment (SHAPE) - to load raw data of different regional applications on the Hadoop ecosystem using Hive.
- Involved in the backend development of Transunion's portfolio analytics product, PRAMA, using Hive, Spark and Python.
- Involved in the implementation of *Data Quality framework* using Python and Shell scripts
 - Developed a dedicated application for automating Data Quality metric collection across internal applications.
 - Populated the metrics collected to PostgreSQL and visualized the live reports using Tableau dashboards.
 - Resolved historical data quality issues by restructuring schema with 100+ tables. Created customized views using T-SQL for audit.
- Contributed to the *Global Credit Data Framework(GCDF)* project by standardizing the codebase of various regional applications.
 - Involved in analyzing and building different schemas and ETL pipelines to align data across countries and across products.
 - Responsible for improving the performance of data marts build by more than 40% using Python and Spark.
 - Reduced the time taken to launch new regional products by more than 50% using GCDF.
- Implemented an automation script that generates HQL DDL, thus reducing the team's manual effort in doing redundant tasks.
- Created shell scripts for automating batch processing on spark and hive-on-spark jobs and scheduled them using AutoSys tool.
- Involved in the production deployment of various TransUnion PRAMA products and internal applications.
 - Includes creation of Change Requests(CR), regular resource/performance monitoring and log analysis for all deployed applications.
- Created multiple views in Apache Dremio from time-to-time to successfully provide connections to Tableau reports.
- Worked on performance tuning of Spark Applications for setting right Batch Interval time, correct level of Parallelism and memory tuning.
- Wrote an automation script for configuring multiple Email notification instances for important AutoSys jobs.
- Investigated, improved, and managed production issues with the engineering team and evaluated the merchant impact, saving \$40,000 for the client overall.
- Involved in creating effective test cases, flow charts, user manuals and other documentation for presenting to key stakeholders.
- Handled an integral part of the ongoing effort to migrate to AWS Cloud using AWS S3 and EC2.

Software Development Intern, Infosys Limited

Jan 2019 – May 2019

- Developed an end-to-end cell phone comparison web application called '*QuickPick*' application that suggests cell phones to users based on factors like price, functionalities, brands etc.

Software Development Intern, Wyndham Grand Manama

Nov 2018 – Dec 2018

- Developed a module in the '*Sales Management System*' of the internal sales team that helped in automating workflow, monitoring progress, and in exceeding sales targets.

ACADEMIC PROJECTS

- Empirical Analysis of J48, Hoeffding, Reduced Error Pruning and Random Forest Algorithms for Income Prediction and Magic Telescope Data Sets
- Mobile Application for "Human Activity Recognition using Smartphone Sensors" using ID3 algorithm