# **RUBAN ESWARAVELU**

Dallas, Texas

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#### **EDUCATION**

#### **Master of Science, Computer Science**

January 2022 - December 2023

The University of Texas at Arlington

Arlington, United States

**Coursework**: Machine Learning, Distributed Systems, Database Systems, Data Analysis and Modelling Techniques, Software Engineering: Analysis, Design, and Testing, Software Engineering: Management, Maintenance, and Quality Assurance, Advanced Topics in Software Engineering, Artificial Intelligence, Web Data Management, Design and Analysis of Algorithms, Computer Networks, Information Security.

**Bachelor of Technology, Computer Science and Engineering** 

July 2016 – May 2020 Chennai, India

**SRM Institute of Science and Technology** 

**RELEVANT SKILLS AND CERTIFICATIONS:** 

Languages: Python, C, C++, SQL (PostgreSQL, Snowflake, Hive, SQL Server, Azure Synapse).

**Tools and Technologies**: AWS EC2, AWS S3, Redshift, Git, VS Code, JIRA, AWS Glue, Apache NiFi, Apache Kafka, ETL, Mongo DB, Spark, Hadoop, Databricks.

Web Technologies: JavaScript, HTML, CSS, Django, Flask, React.js, Node.js.

**Certifications**: AWS Cloud Technical Essentials, Coursera (Technical Support Fundamentals Google, Bits and Bytes of Computer Networking Google).

#### **EXPERIENCE**

#### The University of Texas at Arlington

February 2024 – Present

#### Research Assistant-The Center of Stochastic Modeling, Optimization and Statistics (COSMOS)

Arlington, Texas

Worked on U.S pandemic strategy on various aspects of Covid-19 Linear programming tool using Python that
enables decision-makers to study hypothetical scenarios to inform planning on protecting the most vulnerable
population.

# Amazon Digital Content Associate

October 2020 - November 2021

Chennai, India

- Performed Analysis, quality checks and edits on more than 1000 digital content for the eBook readers, to validate the accurate conversion to the digital format. Created visually appealing Reports by implementing data visualization.
- Worked on content quality check to qualify user experience for content viewing (flow and format quality) and usage on the kindle device. Used software tools for quality audit, content editing and data capture.

#### **Travail Technologies PVT LTD**

**July 2019 - September 2020** 

# **Data Engineer**

Chennai, India

- Implemented a proposed design pattern to automate the ETL processes across millions of records from Synapse to Snowflake using Informatica. Automated a repetitive manual task using python and selenium which reduced an eight-hour task to a few seconds.
- Analyzed, Designed, and Developed an Automation script using python to migrate data from semi-structured files, and capture real-time data from IoT sensors using Kafka into Hive SQL. Recorded a 23% increase in data throughput and Developed NiFi data pipelines to process large tables in PostgreSQL and created lookups for data validation and integrity.

#### **Travail Technologies PVT LTD**

**August 2018 – January 2019** 

# **Data Engineer Intern**

Chennai. India

- Developed code to acquire/transform datasets for machine learning algorithms, analysis and reporting using Python/SQL. Cleaned and transformed product repair data using T-SQL to create standardized fact tables and Metrics.
- Evaluated my work on snowflake schemas by writing SQL scripts to check for NULL counts, column counts, datatype mismatch, and row counts.

#### **Chu Chu TV Studios**

June 2018 - July 2018

#### **Mobile Application Developer Intern**

Chennai, India

- Involved in developing android mobile application using the android studio and developed the front end of the application. Involved in integration of the application with the database.
- Built reusable android software components for the interfacing with our back-end platforms. Analyzed and optimized UI and infrastructure application code for quality, efficiency, and performance.

#### Integrated Analysis and Conservation Strategy for Urban Sustainability | MySQL, AWS

October 2023

- Developed streamlined data pipelines using Amazon Athena to analyze water quality data from IoT sensors, reducing analysis time by 40% and facilitating targeted interventions for pollutions hotspots.
- Utilized Amazon QuickSight to assess biodiversity patterns in urban green spaces, uncovering 80% of plant species exhibiting resilience to climate change, guiding urban planning for sustainable green infrastructure.

#### Predict and Analyze the Bitcoin Price | Python, Machine Learning

April 2023

- Used Linear Regression model to predict and analyze the bitcoin price with the help of historical data of fluctuations in bitcoin prices over the last 10 Years.
- Achieved an R Square score of 0.995.

### VM Consolidation and allocation in Data Centers | Python, Cloud SIM

May 2020

- Used genetic algorithm to improve the utilization of the resources and energy efficiency in cloud data centers and to consolidate the virtual machines in a proper way.
- Used the cloud simulator to generate the workings of the actual data center.

## **INVOLVEMENT**

Rotaract Club of Guindy

2019-2020

Club President Chennai, India

 Planned and lead club meetings set goals, encouraged communication between club and district committees, review expenditures and motivated club members. Created a budget and Manage club finance, including an annual audit.