**SUHAS BHARADWAJ K Employee ID: 1778396 Mail ID:** [**ksuhas.bharadwaj@tcs.com**](ksuhas.bharadwaj@tcs.com)

**Current Role: Axiom Developer in FAST Financing Account SCRUM Team at ABN AMRO Bank**

**Key Skills**

* Data Structures and Algorithms
* PySpark with Azure Databricks
* Core Java
* SQL
* Basics of Azure Cloud
* Basic Unix Commands

**Responsibilities in currently working project**

* Building OS Command modules in Axiom software to automate the delivery of output files to the environments of respective reporting agents.
* Building workflows to load and process the .csv files from different reporting agents.
* Optimizing the running time of FreeForm reports.
* Migrating the Axiom objects from Version 9 (V9) to Version 10 (V10).

**Personal Projects with Git links**

* **[New York City Taxi Dataset Analysis in PySpark](https://github.com/K-Suhas-Bharadwaj/TaxiDataset/blob/main/nyc_taxi_trip_analysis.ipynb)**

This twas done while interning with Ekathva Innovations.

By analyzing the New York City Taxi Dataset that was released by Google on public platform, following answers to the following questions were drawn using the data structures such as **RDD** and **DataFrames**

* 1. How has the number of trips changed over time?
  2. How does taxi usage differ by day?
  3. How does taxi usage differ by time of the day?
  4. How does the weather affect trips?
  5. What are the top trip destinations and where are those trips coming from?

A model was trained to **predict the fare of a given trip** using the Saprk’s Machine Learning Library, **Spark Mllib.**

* [**Deep Steganography**](https://github.com/K-Suhas-Bharadwaj/Deep-Steganography/blob/main/deepsteganography.py)

Give a secret image and a cover image, a mode was trained to hide secret image inside a cover image using **Convolutional Neural Network (CNN).**

**Back Propagation Algorithm** was used to train the network.

* [**Suduko Solver using AI Search Algorithms**](https://github.com/K-Suhas-Bharadwaj/Sudoku-using-AI-algorithms)

Suduko puzzles are generally solved in exponential time complexity by deterministic backtracking algorithms. But, the non-deterministic AI search algorithms such as **Simulated Annealing** and **Genetic Algorithms** can solve the sudoku puzzle in polynomial time.

These algorithms have been implemented in Java to solve the Sudoku Puzzle.

**Research Work**

**Educational Qualification**

**Achievements**

* Champion in paper presentation competition for presenting a technical paper on the application of the probabilistic data structure Bloom Filters in the field of Big Data.
* TCS CodeVita Qualifier

**Certifications**

* [**AZ-900: Microsoft Azure Fundamentals**](https://drive.google.com/file/d/1EZq_nOPiuAT_gyDO4VzsCBMMWWCHQjKD/view)
* [**Artificial Intelligence Search Techniques by IIT Madras**](https://nptel.ac.in/content/noc/NOC18/SEM2/Ecertificates/106/noc18-cs51/Course/NPTEL18CS51S116801381810115566.jpg)
* [**Data Structures and Algorithms by IIT Kharagpur**](https://nptel.ac.in/noc/Ecertificate/?q=noc17-cs20/NPTEL17CS20S1560029171022759.jpg)

**Hobbies**

* Playing Cricket and Badminton
* Cycling
* Practicing spiritual texts