SUHAS BHARADWAJ K

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Current Role:
Axiom Developer at Financing and Accounting Scrum Team at ABN AMRO Bank

Key Skills

- PyTorch to build Convolutional Neural Network (CNN) models
- PySpark with Azure Databricks
- Axiom SL Controller View reporting tool
- Core Java
- SQL
- Basics of Azure Cloud
- Basic Unix Commands

Responsibilities in currently working project

- Building OS Command modules in Axiom software to implement a pipeline for loading and processing of input data from different reporting agents.
- Building CI of CICD pipeline specific to Axiom Software.
- Implementing business rules to generate end reports.
- Optimizing the run time of FreeForm reports.
- Migrating the Axiom objects from Version 9 to Version 10.

Personal Projects

- **Acromegaly Detection**

  Acromegaly is a disease whose primary symptom is light swelling of palms. A CNN model was built using **ResNet-34** architecture to automatically detect if the given hand image is an acromegalic hand or a normal hand.
  Stochastic Gradient Descent was used to train the model.

- **Deep Steganography**

  Steganography is a method of embedding secret data inside a cover data.
  Given a secret image and a cover image, a model was trained to hide secret image inside a cover image using CNN.
  Adam's optimizer was used to train the model.

- **Suduko Solver using AI Search 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.

Internship Learning Project

- **New York City Taxi Dataset Analysis in PySpark**

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

  a. How has the number of trips changed over time?
  b. How does taxi usage differ by day and by time of the day?
  c. 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 **Spark Mllib.**

Worked out IEEE Research Papers

- **Application of Bloom Filters in the field of Big Data**
- **Pipelined van Emde Boas Tree: Algorithms, Analysis and Applications**

Educational Qualification

Qualification	Subject	CGPA	College	Period
Bachelor of Engineering	Computer Science and Engineering	8.5/10	Jawaharlal Nehru National College of Engineering	2016-2020

Achievements

- Champion in paper presentation competition for presenting a technical paper on "Application of Bloom Filters in the field of Big Data".
- TCS CodeVita Qualifier.

Certifications

- **AZ-900: Microsoft Azure Fundamentals**
- **Artificial Intelligence Search Techniques by IIT Madras**
- **Data Structures and Algorithms by IIT Kharagpur**

Hobbies

- Playing Cricket and Badminton
- Cycling
- Practicing spiritual texts