# DAYASHANKAR KUMARESAN

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### **OBJECTIVE**

A driven individual with in-depth knowledge of languages and development tools, seeking a position in a reputed company where I can use my skills to the company's advancement while concurrently aiding my personal growth.

#### **EDUCATION**

#### Master of Science in Computer Science and Engineering

CGPA: 3.4; February 2023

University at Buffalo, State University of New York

New York, USA

- Coursework: Analysis of Algorithms, Information Retrieval, Machine Learning, Computer Vision and Image Processing.

#### **Bachelor of Engineering in Computer Science and Engineering**

April 2019

Rajalakshmi Engineering College, Anna University

Chennai, India

#### **TECHNICAL SKILLS**

Languages: C, C++, Python, SQL, HTML/CSS

Framework: Django, Bootstrap, Keras/Tensorflow, WMI

Software/Tools: Apache Solr, Hyper-V, PostgreSQL, MySQL, Postman, Visual Studio, Git, AWS EC2, Google Colab

## **EXPERIENCE**

# Software Engineer - Full Time

May 2019 – August 2020

Vembu Technologies

Chennai, India

- Worked as part of a team that provides Backup and Disaster recovery solutions for Microsoft Hyper-V Virtualization Environment and Applications such as MySQL, Microsoft SQL Server and Exchange server.
- Designed and developed Scalable and Multithreading product modules from inception until delivery, also worked in pace with the UI development and Quality Assurance teams throughout the life cycle of product development.
- Interacted with customers and resolved issues for numerous tickets.
- Familiarized with Agile Methodology and have been the Scrum Master from time to time.
- Technologies used: C++, SQL, WMI, Hyper-V

R&D Intern May 2018

Robotix – Learning Solutions

Chennai, India

- Worked on the Internet of Things domain with the Research and Development team.
- Designed few simple yet smart devices by programming the Arduino microcontroller with various sensors.
- Technologies used: C++, Arduino

### **PROJECTS**

#### Lamda

September 2021 – December 2021

- Performed extensive analysis to identify the attitude of the common masses and Persons of Interest towards COVID and its vaccines by scrapping about 350K tweets with Tweepy API and analyzing it using Google Natural Language AI.
- Built a search engine with Advanced query filters and represented the analytics with numerous charts.
- Technologies used: Python, Django, Apache Solr

TradeMax December 2021

- Implemented Q Learning Algorithm in Reinforcement Learning to the analyze the current trends in the stock market and make the best possible actions for gaining maximum profit.
- Technologies used: Python, Numpy, Google Colab

FinDoc October 2021

- Built a project on Information Retrieval domain that constructs an inverted index using the input corpus and hosts it as a flask app for querying.
- Preprocessed the input data and constructed inverted index with skip pointers for fast retrieval during querying.
- Implemented the documents to be sorted based on Tf-ldf scores so that the most relevant results are ranked first.
- Technologies used: Python, Linked List, Flask

PreDia September 2021

- Developed a Machine Learning model based on Logistic Regression without using any inbuilt python libraries for fast and accurate identification of diabetes in a person.
- Also implemented Neural Networks using Keras/Tensorflow on the same data to validate previously obtained results.
- Technologie used: Python, Keras/Tensorflow, Google Colab