Shihan Vidulanka

Computer Science & Engineer Undergraduate

Highly motivated with a strong work ethic and expertise in theoretical and analytical skills, I am actively seeking a Software Engineer role in your organization. My academic journey emphasizes effective management and collaborative teamwork, and I am committed to contributing my skills to drive meaningful projects and fostering professional growth through continuous learning.

Contact

- **Phone** : 0771723334
- **Email** : hdsvidulanka@gmail.com
- **Address** : No:99/3, Rose garden, Galloluwa, Welliweriya.
- **Website** : www.shihanvidulanka.com
- **Github** : https://github.com/ShihanVidulanka
- **Linkedin** : www.linkedin.com/in/shihan-vidulanka-19411421b/

Tech Stack

Programming Languages

- Java
- Python
- JavaScript
- PHP
- C++

Frameworks

- React.JS
- Node.JS
- Next.JS
- NestJS
- Flask
- Astro
- Bootstrap

Databases

- PostgreSQL
- MySQL
- MongoDB

Tools

- Postman
- Maven
- Prismic
- Docker
- Jupyter Notebook

Experience

❖ Software Engineering Intern

July 2022 - Jan 2023

Creative Software l 413, R. A. De Mel Mawatha, Colombo 3, Sri Lanka.

- Proficient in ReactJS, NextJS, NestJS, PostgreSQL, TypeScript, and various tools. Specialized in UI and backend development, with expertise in database management.

- Engaged in agile software development, contributed to sprint planning, and collaborated effectively in a diverse team. Demonstrated strong problem-solving and collaborative skills.

- Have experience in technical aspects of the Moving Assistance Platform, ensuring successful implementation. Managed sprints, refining project delivery and contributing to overall success.

- Worked seamlessly in a multicultural team, bridging Sri Lankan and Swedish developers. Navigated project complexities, showcasing adaptability and effective communication. Contributed to collaborative problem-solving within a dynamic team setting.

Tech stack : **Node.JS, React.JS, Next.js, Nest.js, PostgreSQL, Postman, Docker, Prismic.**

Education

❖ BSc Engineering (Hons)

Dec 2019 - Current

Department of computer science & Engineering - University of Moratuwa

- CGPA - 3.64

❖ Secondary Education

Jan 2010 - Aug 2018

Ananda College, Colombo 10.

➤ **GCE A/L : (2018)**
- 3As in physical science stream
- Island Rank - 156
- District Rank - 62

➤ **GCE O/L : (2015)**
- 9As

Expertise

- Web Development
- Desktop App Development
- ML-Model-Development
- Database-Administration
- UI-Ux-Design

Reference

Dr Sulochana Sooriyaarachchi

Senior Lecturer
Dept of Computer Science &
Engineering
University of Moratuwa
Phone: +94 77 669 1011
Email : sulochanas@cse.mrt.ac.lk

S.T. Hapuarachchi

Senior Software Engineer
Creative Software pvt.Ltd
Phone: +94 77 162 7745
Email : sasiru.tharinda@gmail.com

Chamal de Mel

Senior Software Engineer
Creative Software pvt.Ltd
Phone: +94 77 691 7353
Email : chamalnishageeth@gmail.com

Projects

May 2024 - Jul 2023
Ground segmentation using LiDAR sensor

- We have developed a novel vision-based approach for ground segmentation, addressing the challenge of data sparsity by implementing an ellipsoidal windowing technique. This technique effectively extracts relevant features from remote sensing imagery, improving segmentation accuracy.
- Optimized the existing Sphere-Former learning-based semantic segmentation model, achieving performance enhancements

Tech stack : **Python, CUDA programing, C++**

May 2024 - Feb 2024
Developed Lifespark: A Mobile App for Personal Health Monitoring (GITHUB REPO)

- Leveraged Flutter for a cross-platform mobile application to monitor and analyze user behavior patterns related to mobility, sleep, and social interaction.
- Implemented machine learning models (Hugging Face API) to detect potential signs of anxiety and depression based on user input and activity data.
- Employed bi-weekly questionnaires (PHQ-9 and GAD-7) for self-assessment of mental health and provided insights through reports.
- Integrated Firebase for user authentication and data storage, ensuring a secure and reliable user experience.

Tech stack : **Flutter, Flask, SQLite, Firebase, Hugging face, Python Anywhere**

Aug 2023 - Nov 2022
Feature engineering and Complex model building (GITHUB REPO)

- Feature Selection and Engineering for AudioMNIST Speaker Labels In this project, we processed AudioMNIST data with 256 features and 4 target labels. Through techniques like feature selection, engineering, and dimensionality reduction, we enhanced predictive models for Speaker ID, Age, Gender, and Accent. Evaluation will be done on test data using metrics like accuracy, precision, and recall.

- Addressing the Media Campaign Cost Dataset, our team applied regression models (Ridge, Random Forest, CatBoost, Histogram-based Gradient Boosting, and XGBoost) after thorough data preprocessing. Feature engineering involved creating a new feature, and model evaluation used various metrics, with XGBoost emerging as the optimal choice for predicting campaign costs.

Tech stack : **Python, Jupiter Notebook, GoogleColab.**

Aug 2022 - Nov 2022
Constraint-Based Roster Scheduler (GITHUB ORG)

- Collaborated in designing the Constraint-Based Roster Scheduler, a cutting-edge mobile-optimized web application for medical scheduling.

- Designed to simplify and enhance the scheduling process for doctors and consultants, the project introduced dynamic scheduling, streamlined administrative tasks, and provided a user-friendly platform.

- used Python library to schedule and used three separate servers to run the application frontend, backend, and scheduling server.

Tech stack : **Node.JS, React.JS, Flask, MongoDB, Bootstrap.**

Feb 2022 - Jul 2022

Airline reservation system (GITHUB REPO)

- Collaborated on a web-based system for B Airways as a module project, managing flight schedules, reservations, and tickets to enhance operational efficiency, supporting multiple destinations worldwide.

- Seamless user registration, streamlined flight booking, dynamic database design, admin reports, and efficient employee management were key features, ensuring a comprehensive and organized airline management system.

- Leveraged robust database structures, emphasizing data integrity. Executed documentation, functional and non-functional requirements, and effective database planning, showcasing expertise in modern database management technologies.

Tech stack : PHP, HTML, Bootstrap, CSS, MySQL.

Mar 2022 - Jun 2022

Web-based data science platform (GITHUB REPO)

- The system reads the datasets using googleColab functionalities and the corresponding data are put in the database. Therefore, users can view the special information of the datasets using this application

Tech stack : Flask, React.js, MySQL.

Sep 2021 - Jan 2022

Child Care management system (GITHUB REPO)

- Developed the Childcare Management System to address COVID-19 challenges by streamlining child vaccinations and weight recordings.

- This web app ensures secure parent sign-in, and automated notifications, and facilitates direct communication with healthcare professionals.

- Achieved proficiency in MVC implementation and design patterns, showcasing innovative problem-solving amid the pandemic.

Tech stack : PHP, HTML, Bootstrap, CSS, MySQL.

Feb 2021 - Apr 2021

Email Client Project - Java Maven Application (GITHUB REPO)

- Developed a robust Java Maven-based Email Client, leveraging the javax.mail package for seamless email communication.

- Key features include recipient management, personalized birthday greetings, and efficient email serialization for data storage.

- Utilized object-oriented principles and concurrent design for scalability. Integrated with SMTP servers for reliable mail sending and employed Maven for streamlined project management.

- Adhered to coding best practices, ensuring a modular and maintainable codebase. The project showcases proficiency in Java, OOP, and effective use of technology for practical application.

Tech stack : Java, Maven.