Chanvitha Praveen

Computer Engineer at Department of Computer Engineering of
Faculty of Engineering University of Sri Jayewardenepura

✉ chanvithapraween@gmail.com   ☎ (+94) 76 833 1604

○ ChanvithaPraveen   in chanvithapraveen

🌐 chanvithapraveen.me   ⦿ 116/2, Nugasewana, Medemulla, Minuwangoda

As a Computer Engineer, passionate in Full Stack Web Developing, Machine Learning & exploring new technologies. I possess a burning desire to solve real world problems. I'm a hardworking, responsible team player and eager to contribute and learn within a dynamic environment. (Open to work.)

Work Experience

London Stock Exchange Group (LSEG), Sri Lanka - Engineering Intern (10 Months)   *(Feb 2023 - Dec 2023)*
Tech Stack: Python, C++, Java, React, TensorFlow, AWS, Spark, Streamlit
I support & develop sub tasks related to test case generation LLM, Data extract from diagrams & convert them into textual format, program for identify running AWS Instances in every user in the domain in specific region, Data collect & preprocess, anomaly detections, React/Streamlit base frontend for LLM'S prototype testing, and Blockchain Development Research, etc.

Spa Ceylon – Janet Lanka PLC, Sri Lanka – Reception Front Officer & Sales Assistant (1 Year)   *(Oct 2018 - Sep 2019)*

Education

Faculty of Engineering - University of Sri Jayewardenepura, Sri Lanka   *(Nov 2019 – July 2024)*
B.Sc. Eng. (Hons) in Computer Engineering
Minor Specialization: Data Management - GPA: 3.46/4.00

Bandaranayake Central College, Veyangoda - GCE A/L Physical Science Stream: 2A, 1B | Z-Score: 1.713   *(2018)*

President's College, Minuwangoda - GCE Ordinary Level Examination: 9A's   *(2014)*

Proficient Concepts

Object Oriented Programming (OOP)	Data Mining & Database Management	Agile & Waterfall Environment
Data Structures & Algorithms (DSA)	Machine/Deep Learning & Intelligent Systems	Design Patterns
Software Engineering	Micro Services, Monolithic Architectures	Networking & Security

Technical Skills

Languages - C/C++, Java, Python, JavaScript, TypeScript, Dart, HTML, CSS, PHP
Libraries & Frameworks - React, NextJS, NodeJS, FastAPI, SpringBoot, TensorFlow, Flutter, Tailwind, MUI, OpenCV
Databases - MySQL, PostgresSQL, Firebase, MongoDB
Other Technologies - AWS, RESTAPI, Git/GitHub, Bitbucket, JIRA, Jenkins, Linux, Docker, Figma, Postman, Azure
Softwares & Tools - AdobeXd, Packet Tracer, VS Code, Pycharm, IntelliJ, CLion, Illustrator, Photoshop

Soft Skills

Fast Learning, Team Working, Good Communication, Time Management, Problem Solving, Work-Life Balance with Hobbies

Projects & Research

IPL Twitter Hashtags Analysis & Forecaster
This project Analyzes Twitter hashtags data to understand user engagement trends over time & across cities for analyzing past macro-data, past micro-data, forecasting future data. Initial dataset had 11 columns, after feature engineering, could be able to have 22 columns. Hope to add real time data stream analysis part also using Kafka as further improvements.
Tech Stack: Python, Streamlit, CSS, FASTAPI, TensorFlow, Data Mining, Deep Learning, GEO-API

Advanced Vision Sudoku Puzzle Detector & Solver
This project is a 9x9 & 16x16 Sudoku Puzzle Solver application. Detect the puzzle via a camera & OCR by Easy OCR. Then pass the puzzle and solve in C++ because fast execution. For 9x9 puzzle it takes ~2.6ms & for 16x16 puzzle it takes only ~16.5ms.
Tech Stack: C++, Python, React, OpenCV, OCR, Computer Vision, ML, Heuristic Backtracking Algorithm

Distributed Online Airline Reservation System

Developing separate services for User, Reservations, Flight Information, Frontend. Having Eureka service, load balancers, separate databases to have the microservice architecture. Try to maintain zero downtime with multi-servers (Blue/Green).
Tech Stack: Java, SpringBoot, Eureka Server, React, Docker, Microservices Architecture

AI vs Real Human Images (Individual Research)

Classify High Realistic Stable Diffusion AI generated images and Real photographs of Human Faces to protect online privacy. Trained a custom dataset that assembled ~17000 images on ViT (Vision Transformer) model & developed an API to integrate into image uploaders in social media apps, web sites, etc. Currently got 99.97% accuracy & doing more optimizations.
Tech Stack: Python, FastAPI, Google Collab, ViT(Vision Transformers), Pandas, Image Processing

ClothCraft-AR (FYP Group Project)

A project for garment field that users input basic body measurements & the scratch Deep Learning model gives complex body measurements. Users can wear custom garments designed by super admins in virtual wardrobe before purchasing.
Tech Stack: Augmented Reality (AR), Camera Kit(Snap AR), MERN Stack, Python, Data Preprocessing, FastAPI, Google Collab

Realtime Chat Translator

A Web Application with translation functionality for improve the ethnic cohesion. Users can send messages in their language, then translated and displayed to the recipient's chosen language. All messages show in a common chat lobby.
Tech Stack: Python, Streamlit, MyMemoryTranslation API, Realtime Firebase

Inventory Management System

This is a fully functional console-based system. This includes stock, staff, and supply functionalities. Stock refilling, billing, supply origins/destination details, user add/delete, and many more. Used OOP concepts, Design patterns in this system.
Tech Stack: Java, XML, OOP Concepts, Design Patterns

elCare Mobile Application

'Elcare' is developed for senior citizens to assist effectively. They will get digital assistance through this application to easily manage their medical routines, sleep deprivation, emergencies, and to reach the family doctor and share their medical info.
Tech Stack: Flutter, Dart, Firebase, SQLite, Android, Hive

Hotel Management System

Full UI is designed by adobe Xd. It includes Logging, Register, Booking, Gallery User end, Admin panel, Database, & more.
Tech Stack: PHP, JavaScript, HTML, CSS, MySQL, Adobe Xd

Certifications

Python Data Structures - University of MICHIGAN *(Credential)*   SQL For Data Science - UCDavis *(Credential)*
Introduction To Machine Learning – Kaggle *(Credential)*   Introduction To Cybersecurity - Cisco *(Credential)*
React Basics - Meta *(Credential)*   AWS Educate Introduction to Cloud *(Credential)*

Extracurricular Activities & Experience

Editor IT - FLAIR Club - USJ   *Apr 2022 - Dec 2023*
Check all flyers & videos before publishing on social media, Lead the ~20 person media team

Finance Member – IEEE Student Branch - USJ   *Oct 2021 - Oct 2023*
Sponsorships hunting, budget handling of all the events organized by the committee

Lead Marketing Member – Computer Engineering Society (CENSOC) - FOE - USJ   *May 2022 - Jun 2024*
Organizing Industrial Sessions, Events, Competitions

Member - Art & Literature Sub Committee Students' Union - FOE - USJ   *Mar 2020 - Jun 2024*
Active member of Orchestra ('Wassana Heena', 'Viramayak Live in Concert', etc.)

Professional Affiliations   Active Student Member of IEEE & Computer Society   Active Student Member of IESL

Referees

Dr. Udaya Wijenayake
Department Head & Senior Lecturer of Computer Engineering
Faculty of Engineering University of Sri Jayewardenepura
Contact Number: *(+94) 764655928*
Email*: udayaw@sjp.ac.lk*

Mr. Keshan Sodimana
Associate Architect, Machine Learning
LSEG Technology
Contact Number: *(+94) 767979776*
Email*: keshan88@gmail.com*