THARUSHI DE SILVA

Third Year Undergraduate at University of Moratuwa

About Me

I am a motivated IT undergraduate with a keen interest in UI/UX design and Software Engineering. Currently studying for a BSc (Hons) in Information Technology at the Faculty of IT, University of Moratuwa, I enjoy blending creativity with technology to build meaningful user experiences and efficient systems. Alongside these interests, I am also deeply curious about Artificial Intelligence and Data Science, and I'm enthusiastic about exploring their real-world applications. I'm eager to grow through hands-on projects and contribute to innovative, impactful solutions.

Contact Information

in linkedin.com/in/tharushii

 github.com/TharushiDSilva

 hackerrank.com/Tharushi_D

 tharushidsilva.github.io/MyPortfolio/

 071 137 47 44

 desilva.tharushiw@gmail.com
desilvawtw.22@uom.lk

Education

BSc.(Hons) in Information Technology
University of Moratuwa
Faculty of Information Technology
2023 – Present

G.C.E Advanced Level Examination
Lyceum International School (Nuwara Eliya)
Combined Mathematics| Physics| ICT
2019-2021

G.C.E Ordinary Level Examination
N/ Good Shepherd Balika Maha Vidyalaya
2011-2020

Projects

PresCrypt- Doctor Patient Management System
Second year Software Project
Tech Stack: ASP.NET Core (.NET 8)| Next.js| MS SQL

As part of our Second-year software group project, I developed key modules of PresCrypt, a secure web-based medical portal for managing patient records, doctor appointments, and role-based access. I was responsible for implementing the full authentication and authorization system using ASP.NET Core and C#, with features such as JWT login, email verification, password reset, and 2FA for admins. I also built an AI-powered chatbot using Flask and the Google Gemini API to assist patients with appointment booking, health record access, and portal navigation. Additionally, I contributed to frontend development with Next.js and Tailwind CSS and handled secure database connectivity with Microsoft SQL Server,

Water Tank Cleaning System
First year Hardware Project

The project featured an innovative automated water tank cleaning system, designed to eliminate manual cleaning and ensure safe water consumption. A key highlight of the system was its integrated motorized lid mechanism, which housed water pumps, rotating cleaning brushes, and sensor units. Sensors monitored water levels and cleaning status, while the pump system sprayed pressurized water across the tank's inner surfaces to remove sediments and contaminants. This comprehensive cleaning cycle was fully automated using an Arduino microcontroller, ensuring the tank was thoroughly cleaned without human intervention.

FlagX – Premium Smartphone Comparison Platform
Tech Stack: React | Ballerina | MongoDB

FlagX is a modern web platform designed to streamline the smartphone buying experience by focusing exclusively on flagship devices. The system simplifies the user journey by offering real-time comparisons, launch updates, and easy communication, all optimized through seamless integration between the frontend, backend, and database. It uses Ballerina's integration capabilities to fetch and display live data for in-depth device comparisons. Also, it automatically pulls updates and expected launch dates from official Apple and Samsung sources using Ballerina APIs.

Capstone Project
Information Management System for a school
Angular | Node.js | Express.js | SQLite

As part of the Trainee Full-Stack Developer Program offered by the University of Moratuwa, I developed a web-based School Information Management System as a Capstone Project. The system was designed to manage teacher and student data through complete CRUD (Create, Read, Update, Delete) operations. The frontend was built using Angular, delivering a responsive and user-friendly interface. The backend logic and RESTful APIs were implemented using Node.js and Express.js, while SQLite was used as the relational database to manage and store application data efficiently. The project began with implementing teacher-related functionalities and was later extended to include student management features.

Technical Skills

LANGUAGES

C
C#
Python
Java
JavaScript
SQL
PHP

WEB TECHNOLOGIES

HTML
CSS
Tailwind CSS
Material UI
Next.js
Node.js
React.js

FRAMEWORKS AND TOOLS

ASP.NET 8
Flask
REST API

AI & CHATBOT INTEGRATION

- **Google Gemini API**
- **NLP Basics**

DESIGN & PROTOTYPING

- **Figma,**
- **UI/UX Design Principles**

TOOLS

- **Visual Studio**
- **VS Code**
- **GitHub**
- **Postman**

REFERENCES

Mr. Kugathasan Shanjeeva
Technical Lead
Creative Software

Mr. Kasun Chathuranga
Senior Software Engineer
Creative Software

Ms. M.N. Chandimali
Department of Information Technology
Faculty of Information Technology
University of Moratuwa

My Portfolio

Designed and developed a responsive personal portfolio to showcase my projects, skills, and achievements. Built using Next.js and Tailwind CSS, the site reflects modern UI/UX design principles and emphasizes performance and accessibility. Deployed on GitHub Pages, it serves as an interactive and continuously updated professional profile.

ACHIEVEMENTS

- 2nd Runner up of J'PURAXTREME Hackathon 0.1
- Participant of INTECS CODERUSH 2023.
- Selected for Finalists of UOJ Coders.
- Participated in IEEE Xtreme 18.0 Programming Competition.
- 6th place in INTECS CODERUSH 2024.
- Selected for Finalists in CodeJam by CSE 2025
- Outstanding volunteers of IEEE WIE for month November.
- Selected for the 2nd round of the InterfaceX Designathon 2025 powered by ASTA.

Memberships

- Event Co-Chair of Project "ENGINUITY 2.0" powered by IEEE WIE Student Branch Affinity Group of University of Moratuwa.
- Delegate Handling Committee Member of Innovate with Ballerina 2025.
- Committee member of Programme and Technical committee for IEEE Xtreme 18.0 and Mora Xtreme 9.0
- Design Committee Member of Computer Society - IEEE University of Moratuwa Student Branch
- Editorial Committee member of the IEEE Technology and Engineering Management Society (TEMS) Student Branch Chapter at the University of Moratuwa.
- Design Committee Member of IEEE RAS Student Branch Chapter of UOM.
- Design Committee Member of XpertsMora'24 powered by IEEE Industry Applications Society - University of Moratuwa
- Team member in MARCOM team (Colombo South) AIESEC in Sri Lanka.
- Design Committee member in IEEE WIE (Women In Engineering).
- Publicity committee member Octwave 2.0 powered by IEEE Industry Applications Society - University of Moratuwa
- Member of the faculty orchestra " FIT Tunes".

Skills

- Collaboration and Communication.
- leadership and team coordination.
- Time Management and Multitasking.
- Problem Solving and Debugging.
- UI/UX Design Thinking.
- Secure code practices.

INTERESTS

- Travelling
- Playing guitar
- Volunteering
- Doing exercises