BASADEE WARNIKA THENNAKOON

ABOUT ME

With a strong aptitude for teamwork, adaptability, and a commitment to excellence, I am eager to pursue a career in computer science engineering. My passion for technology, combined with my academic background, equips me to contribute effectively to innovative solutions. I am excited to join a dynamic team where I can further develop my skills and make a meaningful impact in the field

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LinkedIn

GitHub

TECHNICAL SKILLS

- PYTHON | JAVA | JAVASCRIPT |
- REACTJS | NODE JS | SPRINGBOOT |
- MYSQL | POSTGRESQL | MONGODB |
- COMPUTER VISION | LARGE LANGUAGE MODELS
- AWS | GCP |

COMPETITIONS AND VOLUNTEERING

- IEEE Extreme 16.0 (Island Rank - 87 | World Rank - 1434)
- MORAXTREME 2.0
- DATASTORM 4.0 (Rank - 32 Storming Round)
- Volunteering at EXMO Web & App development team. - 2023

WORK EXPERIENCE

SyscoLABS Technologies Private Limited
Intern Software Engineer 2023 Nov - 2024 May
- Intern Software Engineer at Team EAG

Teaching Assistant
Database Systems Module 2024 Jul - Present
- Under the supervision of Dr. Sapumal Ahangama.

EDUCATION

BSc Engineering Honours Degree Specialized in Computer Science and Engineering, University of Moratuwa
- GPA of 3.444 out of 4.0 2021-present
- Stream of Data science

Sri Lanka Singappore Friendship College
- G.C.E A/L 2019: 3A Passes (Physical Science Stream) 2011-2019
- G.C.E O/L 2016: 9 A Passes

PROJECTS

Automated Feedback Generation System with Metacognition (Final Year Group Project— Ongoing)

- Project Overview
  - The project aims to enhance the tutoring experiences for computer science students by generating personalized feedback based on learners' cognitive and metacognitive data. It focuses on guiding students on their problem-solving both in introductory and competitive-level algorithm design tasks by tracking performance, identifying learning gaps, and delivering targeted step-by-step feedback to support self-regulated learning, which has been personalized by each student's unique metacognitive ability.
- Contribution
  - Developing a custom Large Language Model (LLM) architecture using the Persona Adaptive Attention Mechanism through fine-tuning.
  - Collaborative support in creating a dataset for fine-tuning by designing a metacognition questionnaire and organizing a hackathon to gather relevant data.
- Used Technologies
  - Python (LLM fine-tuning), Kaggle , Colab

FIELDS OF INTERESTS

- FULL STACK WEB DEVELOPMENT
- MACHINE LEARNING & AI
- MOBILE APP DEVELOPMENT

REFERENCES

Dr. Sandareka Wickramanayake,
Senior Lecturer,
Department of Computer Science and Engineering,
University of Moratuwa.
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Warehouse Productivity Analysis System
(Internship Project)

- **Project Overview:** Developed a system to analyze live feed data from cameras in Sysco warehouse docks during good dispatching processes, providing actionable insights, real-time alerts, and performance metrics for warehouse managers and employees, to optimize operations and improve efficiency.
- **Used Technologies:** Python (Computer Vision—Yolo model tuning) , AWS Sagemaker

B2B Sales Application (Internship Project)

- **Project Overview:** Developed a full-stack B2B sales application using Spring Boot microservices, Node.js as the Backend-for-Frontend (BFF), and Single SPA React.js for micro-frontends. Integrated PostgreSQL for database management to support seamless business transactions and improve system scalability.
- **Used Technologies:** ReactJS , NodeJS , SpringBoot , PostgreSQL

Visual Product Recognition System
(Semester 5 Group Project)
HuggingFace | MVP StreamLit APP

- **Project Overview:** Developed a visual product recognition system using a CNN-based image similarity model to identify and retrieve up to 1000 similar images based on Euclidean distances between embeddings.
- **Contribution**
  - Collaborative support in developing the CNN-based model, Convenxt.
  - Built the web application using React front-end , Flask back-end.
- **Used Technologies:** CNN (for ML model), React, Flask

Supply Chain Management
(Semester 3 Database Systems Group Project)

- **Project Overview:** Developed an e-commerce platform for buying, selling, and delivering goods, streamlining supply chain operations.
- **Contribution**
  - Collaborative support in developing the front-end using ReactJS and managed the database.
- **Used Technologies:** ReactJS, Node JS, MySQL

Email Client (Semester 2 project).

- **Project Overview:** Automatic email responder CLI. Based on Java object-oriented programming and Java design patterns.
- **Used Technologies:** Java , OOP , Design Patterns