Sandil Ranasinghe

Computer Science & Engineering Student | Full Stack Developer with over 5 years of experience | Currently taking an interest in Machine Learning and related applications

CONTACT DETAILS

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WORK EXPERIENCE

Ruach Holdings - Consultant Software Developer (Part time)   August 2024 – Nov 2024

Adapting existing codebase of a framework for a new web application prototype. I was responsible for initial containerisation, dev server deployment as well as designing DB extensions, logical flow and implementing API endpoints for new modules added.

University of Moratuwa - Teaching Assistant   May 2024 – Dec 2024

Conducted lab sessions and evaluated quizzes/labs for semester 3 Operating Systems module.

H2O.ai - Data Science Intern   Nov 2023 – August 2024

Developed GenAI-based applications using H2O.ai's h2oGPTe RAG system and h2o Wave application framework to solve real-world business problems. Experienced in fine-tuning prompts and utilizing large language models (LLMs) for tasks such as context-based question generation and semantic similarity evaluations for content benchmarking. Received exposure to coding web applications with a focus on error handling and concurrency for performance optimization.

IFS x Hatch ChallengerX - Machine Learning Incubator Program   Dec 2022 – May 2023

https://ifs-challengerx.hatch.lk/
Part of a 4 member team selected for the program from dozens of teams across multiple universities. We received the opportunity to meet and be mentored by industry leaders while developing a solution for modeling and predicting damage to assets due to natural disasters. My primary responsibility involved designing and implementing a robust Machine Learning pipeline.

GOOGLE SUMMER OF CODE 2022 - Contributor at Wagtail CMS   May 2022 – September 2022

https://summerofcode.withgoogle.com/programs/2022/projects/It13tsFg
Main changes merged into open source CMS Wagtail while additional features are maintained as a separate package. Received mentoring by experienced developers, gaining valuable insights into coding best practices alongside technological expertise. Tech Stack – (Python/Django/Wagtail)

FREELANCE - Full Stack Developer

Some work done,
- *Setting up Moodle LMS for https://cjmaths.lk/*
- *Developing an AI-powered resume review application for The Job Helpers*
- *Assisting undergraduate/research students with code/script parts of projects (Web/ML)*
- *Web Scraping project for Avonov Global*

STACK TECHNOLOGIES - Intern Full Stack Developer   Sep 2019 – Aug 2021 (2 years)

Received training and then worked as a full stack developer, utilizing widely used frameworks such as React and Django. Projects worked on,
- *SLTB citybus app (main developer for initial version, app available on playstore)*
- *DSI planning software (creating models and handling logic at API, querying and visualizing data)*
- *Dealer management software for Zigo (basic work, learning)*

CERTIFICATIONS

- Deep Learning Specialization on Coursera by DeepLearning.AI (5 course specialization)
- Large Language Models (LLMs) – Level 3 by H2O.ai
- Python3, Javascript by Sololearn.
- Youth Leadership program by the Smedley Toastmasters Club and the Gavel Club of Royal College.

STACK

- **Programming Languages** – Python, JavaScript, C, C++, Java, Lua
- **Web Development** – FastAPI, HTML, CSS, React, Vue, Django, h2o wave, Wagtail, Selenium
- **Database Systems** – SQL, PostgreSQL, MongoDB
- **Machine Learning** – PyTorch, Scikit-Learn, Pandas, Numpy, LangChain, h2oGPTe, h2o DAI
- **Mobile Development** – React Native, Solar2D
- **Tools** – Git, Linux, VSCode, Docker

EDUCATION

UNIVERSITY OF MORATUWA – Undergraduate in Engineering (CSE)
2021 – Present

Clubs and Societies,

- Member of the Gavel Club of UoM , Webmaster 2023/2024
- Member of the Mathematics Society of UoM, committee member 2021/2022

Non Academic Work,
- Part of official app development team for EXMO 2023 exhibition organized by UoM
- Managed deployment of website for MoraUXplore UI/UX competition
- Part of team creating questions for MoraXtreme 7.0 programming competition
- Codeveloper for Speech Olympiad XV website. (https://speecholympiadxv.github.io)

ROYAL COLLEGE, COLOMBO 07 – GCE AL
2011 – 2019

- GCE AL Mathematics Stream – 3As – (Maths, Physics, Chemistry)
- Member of the English Debaters Council of Royal College (2015 to 2018), **Treasurer 2016/2017**
- Member of the Gavel Club of Royal College (2011 to 2018), **Vice President 2017/2018**

ACHIEVEMENTS

Programming

- Runners up at RootCode Tech-Triathlon Design, Hackathon and Datathon organized by RootCode.
- Runners up at ChallengerX ML Incubator program by Hatch x IFS.
- Runners up at Datastorm 4.0 (2023), data science and analytics competition.
- Ranked 2 in SL / 129 world rank at IEEEXtreme 16.0 (2022)
- Semi-Finalist at Datastorm 3.0 (2022), data science and analytics competition.

Mathematics

- Honorable Mention at the 58th International Mathematics Olympiad. (Brazil 2017)
- Participated in the 56th International Mathematics Olympiad. (Thailand 2015)
- Awarded a Bronze Medal (under 17 category) at the IMC in China 2015.
- High Distinction at the Sri Lankan Mathematical Olympiad in years 2013, 2014, 2015, 2016, 2017.

Debating

- Winners at Hulftsdorp Inter University Debating Championship 2023 organized by the Law College of Sri Lanka.
- Participated in the Asia World Schools Debating Championship in Thailand 2016.
- Winners at DC League 2017/2018 organized by the Debaters Council of Sri Lanka.
- Selected for the national debaters pool in 2017.