Sindhura Rajiv Jain

Email: sindhura394@gmail.com | Website: https://sindhurajain.github.io/portfolio/ | Linkedin: https://www.linkedin.com/in/sindhura-jain | GitHub: https://github.com/sindhurajain | Phone: +65 84476684

EDUCATION

National University of Singapore
Bachelor of Computing (Honours) in Computer Science, 2nd Major in Mathematics
Technical Skills: Python, JavaScript, TypeScript, Java, C, C++, Swift, HTML/CSS
Frameworks & Technologies: ReactJS, TailwindCSS, PyTorch, Keras, Tensorflow, ExpressJS, NodeJS, MongoDB, Flask, Spring Boot, REST API, Angular, MySQL, VIM, Linux/Unix
Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Computer Organisation, Calculus, Discrete Mathematics, Linear Algebra, Probability & Statistics
Distinctions: NUS Merit Scholarship for academic excellence, Honors College

WORK EXPERIENCE

Machine Learning Research Intern (Full-Time) May 2023 - Jul 2023
Agency for Science, Technology and Research
- Used PyTorch to explore the use of generative models such as GANs and Variational Autoencoders for query synthesis-based active learning approaches for analog circuit design regression application

Research Assistant (Part-Time) Jan 2023 - Apr 2023
National University of Singapore
- Wrote Python scripts using Epitran library for grapheme-to-phoneme conversion of poetry written in various languages for "Universals in Language Iconicity" linguistics research project
- Built web scraper in Python using BeautifulSoup to create corpus of Thai poetry

Software Engineering Intern (Part-Time) Sept 2022 - Jan 2023
SpooQy Lab, Centre for Quantum Technologies
- Developed a machine learning model in Python using TensorFlow to classify images of clouds by cloud cover
- Improved model accuracy from 40% to 90% by reducing overfitting
- Integrated into a website with Flask backend and ReactJS frontend to predict the classes of user-uploaded images

PROJECTS

Stock Price Time Series Forecasting Model | *PyTorch, Python, Pandas*
- Developed Long Short-Term Memory (LSTM) neural network in Python for time-series forecasting of stock prices with an R^2 score of 0.97 (1.0 being a perfect prediction), indicating good performance

LangCPP | C++
- Created a List Processing (LISP) programming language in C++ that can evaluate functions, follow control flow and handle exceptions by creating a lexer, parser, evaluator and REPL interface

Multi-Client Chat Application | C, socket programming, multithreading, GUI
- Developed a multi-client chat application in C using multithreading in socket programming and created GUI

Full-Stack Student Management System | *Java, Spring Boot, RESTful APIs, Angular, MySQL*
- Applied object-oriented programming concepts to develop full-stack student management system CRUD application in Java
- Created RESTful APIs using Spring Boot connected to MySQL relational database and Angular for frontend

Personal Website | *ReactJS, HTML5, CSS3, MaterialUI* | https://sindhurajain.github.io/portfolio/
- Developed portfolio website ReactJS application to showcase projects and skills, deployed on GitHub Pages

Full-Stack Blog Website | *MongoDB, ExpressJS, ReactJS, NodeJS (MERN Stack), Docker*
- Developed features of authentication, creating, editing and displaying blog posts using ExpressJS/NodeJS connected to MongoDB database for backend and ReactJS for frontend, deployed using Docker

ACTIVITIES

- Head of NUSClimatech (green technology interest group)
- Editor for Yale-NUS Undergraduate Research Journal