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Looking for credit bearing internships Jan 2024 – Jun 2024

EDUCATION

Nanyang Technological University, Singapore Aug 2021 - May 2025

Bachelor of Engineering (Electrical and Electronics Engineering) with a Minor in Computing and Data Analytics

- Expected Honours (Distinction), Current CGPA: 4.37/5.00
- Relevant Modules: Data Structures and Algorithms, Artificial Intelligence and Data Mining, Analog Electronics, Microprocessors

INTERNSHIP EXPERIENCE

Ernst & Young, Singapore May 2023 – Aug 2023

Forensic Data Analyst Intern

- Utilised clustering and anomaly detection techniques to identify suspicious vendors from invoice data. Ran several tests on MySQL to identify and further shortlist invoices and vendors which were potentially fraudulent. Developed interactive dashboards on Power BI to visualize and analyse the invoice data of these suspicious vendors.
- Conducted network analysis using Neo4j to analyse connections among individuals associated with the list of suspicious vendors, providing comprehensive insights into potential fraud networks.
- Performed fuzzy matching techniques using Python (Pandas, Regex), to match filenames from several datasets to a list of important files.
- Skills: Python, Pandas, MySQL, Neo4j (NoSQL), Power BI

Ventrx, Singapore Feb 2023 – May 2023

Frontend Development Intern

- Created a website for a start-up (Ventrx) by the Disaster Analytics for Society Lab @ NTU using ReactJS, HTML, and CSS.
- Developed an interactive map dashboard utilizing the Mapbox API and ReactJS. This dashboard empowers users with navigational control across the map, a geographical search bar, and the capability to generate, position, and display markers within the interface.
- Skills: ReactJS, HTML, CSS

Indium Software Pvt. Ltd., Chennai, India Jun 2022 – July 2022

NLP Engineer Intern

- Automated the extraction of financially critical clauses from legal contracts using BERT and TensorFlow.
- Performed an OCR on several contracts and extracted all clauses from it using Pytesseract. Created a dataset containing these clauses and annotated them as critical and non-critical clauses.
- Executed pre-processing and tokenization on the input dataset and utilized this to train the BERT model for binary text classification using neural networks. This model is very accurate in extracting critical clauses from legal contracts with a very high recall (98.4%) and is now being used by the firm to extract all financially critical clauses automatically.
- Skills: Python, BERT (Transformer), TensorFlow

PROJECTS

Continental-NTU Corporate Lab, Singapore Aug 2023 – Present

AI-powered Driver Behaviour Profiling system

- Development of driving simulator for emulating real driving scenarios and collecting the driving data for driver behaviour profiling as well as notifying unsafe driving events presented to drivers in real-time to prevent accidents.
- Utilization of various Deep Learning Algorithms to identity risky and unsafe driving practices and perform rating/categorizing drivers into different categories using the driving data obtained. Integration of driver behaviour profiling techniques into the driving simulator platform.

URECA (Undergraduate Research Experience on Campus) NTU, Singapore Aug 2023 - Present

Hardware-Software Co-Exploration for Efficient Edge Intelligent Systems

- Optimization of Deep Neural Networks for application on edge systems to maximise performance under the guidance of Associate Professor Weichen Liu.
- Performing model pruning, model scaling, performance benchmarking (latency), and neural architecture search techniques to boost the result on the target edge devices. Implementation of an efficient edge DNN system with the best accuracy and latency.

Automated License Plate Recognition System Jan 2023

- Created a CNN Machine Learning model to extract license plates from live video footage of moving vehicles.
- Performed an Optical Character Recognition (OCR) on the extracted license plate using pytesseract to extract the text from the image.

Nanyang Technological University, Singapore Oct 2022 - Nov 2022

IE0005 Data Science Project – Spotify Music Recommendation System

- Recommended a personalised playlist based on the user's past music history.
- Normalised the data present in the dataset provided by Spotify. Performed several feature selection techniques to determine the most important features of a song (valence, popularity, danceability, energy, etc.), and clustered the songs in the dataset using Kmeans.
- Queried the user's playlist and found 10 songs and artists in the clustered dataset which closely resembled the features of the user's song choices using cdist. Created a personalised playlist that caters to each user's unique taste.

CO-CURRICULAR ACTIVITIES

ASME (The American Society of Mechanical Engineers) NTU SS Aug 2023 - Present

Honorary Secretary General

- Responsible for the smooth conduct of technical workshops, hackathons, and events held by the club. In charge of the execution of creative promotional strategies, and networking events to expand the organization's reach and visibility.

EFFINITY 2022 Sep 2022

Logistics and Programmer

- Responsible for planning, execution, and logistics of various events for the incoming batch of freshmen
- Orchestrated various games to help the freshmen interact with each other and ease into university life

High School Student Council Aug 2018 - May 2020

House Captain

- Elected by peers as the House captain of the school for two years (2018-19, 2019-20) in succession.
- Directed the planning of all events (Sports Day, School Festival, etc.) and assemblies.

AWARDS & HONOURS

Scholarship for Higher Education under INSPIRE scheme May 2022

- Recipient of the Scholarship for Higher Education by virtue of performance in the top 1% in the Class XII Board examination

All-Rounder Award (CLM Sishya OMR School) July 2019

- Awarded the 'All-Rounder Award' in 2019 for consistent and extraordinary performances in academics and sports, and various leadership qualities exhibited throughout schooling years.

SKILLS

- Programming Languages: Python, Java, JavaScript (React), HTML, CSS, MySQL, NoSQL, C
- Data Visualization: Tableau, Power BI
- Data Science and Machine Learning: Pandas, TensorFlow, NumPy, Scikit-Learn
- Image Processing: OpenCV
- Computer: Excel, Word, PowerPoint

CERTIFICATIONS

- Applied Machine Learning in Python
- Getting Started with TensorFlow 2
- Managing Big Data with MySQL
- Introduction to Probability and Data with R