

# SARANGA KUMARAPELI

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## SUMMARY

Energetic, passionate, and determined undergraduate working towards a BSc in Computer Science at Informatics Institute of Technology by the University of Westminster, United Kingdom. I am looking forward to working in a competitive organization to improve myself and my career with the aim of using my knowledge in data science to develop and implement solutions along with using new innovative ideas and excellent skills of teamwork and active listening to provide a better service for the organization as well as the clients.

## EDUCATION

### BSc.(Hons) Computer Science (2020-2024 PT batch)

Graduating 2024

Informatics Institute of Technology

Faculty of Computing

Relevant coursework: Applied AI, Machine Learning and Data Mining, Advanced Analytics, Data Visualization and Dashboarding, Computer Science Practice, Database Systems

### GCE A/L

2019

Combined Maths - C, Physics - C, ICT - C

## TECHNICAL SKILLS

**Approaches:** Machine Learning, Deep Learning, Time Series, NLP

**Tools:** Excel, VS Code, Jupiter Notebooks, Google Colab, Powerbi, Tableau

**Programming:** Python, R, SQL, Java, Tensorflow, fastapi

**Certifications:** Kaggle:(Python, Into to Machine Learning), Click to See Certifications

## EXPERIENCE

### MAS Active - Digital Excellence, : Executive - Data Analytics

Oct 2022 - Present

- Mainly worked on internal projects within the group
- CAPEX Platform:- power application which focuses on requesting CAPEX budgeted and unbudgeted requests and getting approval. system handles both requesting and approval processes and track records. (power apps, Sharepoint)
- EXCO Dashboard:- bi dashboard which covers main pillars at a glance of how business drives. worked on assigned tasks and data modeling activities. (power bi, DAX)
- Supplier Score Card:- end-to-end powerbi dashboard from data modeling to visualization. worked on full requirement gathering to deliver end solutions to the Active Supply Chain team. (power bi, DAX, power automate, data modeling)
- Knowledge Sharing:- conducted some knowledge sharing sessions for internal teams by request for level-up of their digitalization journey.

### Kainovation Technologies, : Data Scientist - Internship

Nov 2021 - Oct 2022

- Mainly worked on POC projects on cutting-edge technologies.
- Twitter Analytics:- Extract data from Twitter using developer API and build a POC project with sentiment analysis, topic modeling, named entity recognition, frequency analysis, and visualizations. (python, streamlit, huggingface)
- Web Scraping using requests:- Scraped over 500K records by using Python requests and structured in a tabular format(python)
- CEB Water Management Dashboard:- worked on end-to-end Powerbi dashboard for CEB. Starting from data entry forms to modeling data and visualizing on Powerbi(Google Apps Script, Powerbi)
- Pdf data extraction:- Extract, clean, transform and structure required data from multiple formats of pdf types such as Invoices and mandate forms (python, fastapi)
- Document Classification:- Classify multiple documents such as ID and invoices using computer vision techniques and store the required format.(python, opencv, text preprocessing)

### Silueta - Technologies by MAS, : Industrial Engineer - Internship

Feb 2021 – Oct 2021

- Data Science covid risk profiling Project:- gathered data through a survey and based on answers built a statistical model to categorize employees to "High Risk", "Moderate" and "Low Risk".(python, Excel)
- Silueta's Smart Factory IoT System Troubleshooting and Data Verification(Random Sampling, Project Management, Data gathering and Analysis)

- OEE Data Analytics:- Overall equipment effectiveness measures how well a manufacturing operation is utilized when it is scheduled to run compared to its full potential. I was responsible for data extraction, transformation, and reporting daily basis (Excel, data analysis)

## PROJECTS

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### Multiple PDF chat application

June 2023 - Present

PDF chatbot experiment using Openai api's and langchain and learning fundamentals by using deeplearning.ai short courses.(python, streamlit, langchain)

### Sales Forecasting using Machine Learning

May 2023 - Present

experimenting with different effective approaches to forecast sales using machine learning.

- preprocess data and converting time series problem to machine learning problem
- train, test different techniques, and evaluate
- create tableau dashboard for writing forecasting model scripts inside tableau backend.(python, machine learning, tableau)

### Evolution of Artificial Intelligence: <https://shorturl.at/sIKM5>

Apr 2023 - present

Discover the key milestones, groundbreaking innovations, and transformative applications that have shaped the AI landscape. With dynamic charts, graphs, and engaging visuals, you'll gain a deeper understanding of the incredible progress AI has made over time.

- end-to-end power bi dashboard with interactive visualizations.(data modeling, powerbi)

### MRI-based brain tumor image Classification using CNN-based Deep Learning: <https://shorturl.at/AEGU1> Jan 2023 - May 2023

Using CNN-based Deep Learning, this project focuses on MRI-based brain tumor image classification. It covers AI applications in medicine, tumor detection through medical image analysis, implementation, evaluation, and result assessment. (python, deep learning, CNN)

### Red Wine Analysis - Clustering / PCA: <https://shorturl.at/fmMOT>

Mar 2022 - May 2022

performed data analysis and clustering sung red wine dataset

- The analysis involves pre-processing data, determining the number of cluster centers manually or using automated tools, performing K-means analysis for each attempt, evaluating outputs against the 12th column, and selecting the final "winner" cluster based on evaluation indices. Additionally, applying PCA, creating a new dataset with significant PCs, and conducting K-means on the reduced dataset. Performance is assessed using WSS, BSS, and BSS/TSS indices and compared with the previous model.(R)

### Energy Forecasting - MLP: <https://shorturl.at/rtyFJ>

Mar 2022 - May 2022

experimented with different MLP architectures to forecast Energy consumption levels.

- creates new features using existing features and experiment mlp models considering evaluation metrics. (R)

### Data Science Projects: <https://github.com/Saranga99/data-science-projects>

2021 – Present

I started learning data science concepts in 2021 and created this repository to commit my every single learning progress along with tutorials, projects, and certifications.

- Machine Learning Projects
- NLP Projects
- Data Visualization Projects

## NON-RELATIONS

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Thashika Rupasinghe, Ph.D.

Director - Inbound Supply Chain Analytics COE

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