

Venura Jithmal Pussella

Email: venurajithmal@gmail.com | Mobile: 0716399826

Website: <https://venura-94.github.io/> | LinkedIn: Venura Pussella | GitHub: Venuras-Repos

An experienced wireless engineer transitioning into a data enthusiast, I am passionate about uncovering the stories hidden within numbers. Utilizing state-of-the-art AI/ML, I construct end-to-end systems to reveal these narratives. I aim to develop accurate models that contribute to societal betterment and simplify complex concepts for real-world applications, seizing business opportunities.

WORK EXPERIENCE

Software Engineer (contract basis) Dozen Solutions Pvt Ltd, Sri Lanka 2024 - Present

Automated HR Morning Emails

- Developed a Python-based automation system for generating and sending daily morning emails with learning content and motivational quotes (Ongoing – NLP, Text generation, Content personalization, Text summarization).

Due Invoice Reminder Emails Automation

- Implemented a Python-based automation system for sending timely invoice reminders to clients for overdue payments.

Wireless Engineer, Huawei Technologies (Pvt) Ltd, Colombo, Sri Lanka 2019-2023

Mobitel, Airtel & Dialog Projects

- Started as an assistant engineer, then promoted to wireless engineer by leading site engineering teams, and other subcontractor teams towards company goals and achievements.
- Troubleshooting site commissioning, and capacity solutions, and conducted client presentations and training sessions to ensure clear communication of technical concepts for efficient project delivery.
- Proactively tested new products and features (4G & 5G) showcasing readiness and adaptability to embrace evolving technologies.

EDUCATION

University of Sri Jayewardenepura, Sri Lanka 2021-2023

MBA in Management

General Sir John Kotelawala Defence University, Sri Lanka 2015-2018

BSc. (HONS) In Electronic & Telecommunication Engineering

Royal College, Colombo 07, Sri Lanka 2010-2013

G.C.E Advanced Level| Z-Score – 1.62

TECHNICAL SKILLS

Languages: Python, SQL, HTML & CSS

Data Science Stack: TensorFlow, Keras, Pandas, NumPy, matplotlib, Scikit-learn, Streamlit, Hugging face, Flask, FastApi, gensim, NLTK, Spacy

Database: MySQL, Microsoft SQL Server, Advanced Excel

Cloud & CI/CD: AWS, Git, GitHub Actions, Docker

PROJECTS

Loan Default Risk Prediction System December 2023-March 2024

- End-to-end machine learning system for lending decision-making, data preparation, model training, and evaluation through a training pipeline, cloud deployment & web application development to facilitate inferences via an inference pipeline, and model monitoring for performance optimization.
- Technologies: Python envs, XGBoost, AWS EC2, Docker, AWS/GitHub Actions(runner), AWS ECR, Flask

Road Sign Classification System February 2024-April 2024

- Utilized a CNN to classify 43 traffic sign images focusing on applications in self-driving cars, and further implemented a prediction pipeline to streamline the classification process.
- Technologies: TensorFlow, Keras, Flask, Docker, TensorFlow Serving

Fake News Detection System Utilizing LSTM March 2024-April 2024

- Utilizing NLP techniques, aimed to find out fake from real news articles, enhancing online information source reliability.
- Technologies: TensorFlow, Keras, NLTK, gensim, LSTM, FastApi

Food Recommendation System

February 2024-April 2024

- Employing collaborative filtering and cosine similarity to analyze user-item interactions matrix and suggest items based on similar users' food interactions.
- Technologies & Techniques: Python, Interaction Matrix, Cosine Similarity

Revenue Analysis & Growth Trends

April 2024

- Analysis of sales trends and comparisons across different categories, regions, and periods of the business. End-to-end ETL pipelines were created.
- Technologies: Microsoft SQL Server, Python, Pandas, REST API, SQL

Wholesale Distributor Customer Segmentation Analysis

December 2023

- Identify clusters to tailor personalized strategies for customer groups, enhancing product delivery efficiency.
- Technologies: K-Means, PCA, Seaborn

Music Database Management System

January 2024

- System to efficiently organize and manage music databases, catering to the needs of music libraries.
- Technologies & Techniques: SQL, MySQL, EER diagrams, joins, Aggregate & Nested queries, Stored procedures

DataScienceJobs24 Dashboard

February 2024

- Web application powered by Streamlit for interactive data analysis and visualization on data science job postings.
- Technologies: Streamlit, Pandas, matplotlib, Plotly, Word Cloud

Revenue and Stock Price Trends of Tesla and GameStop

March 2024

- System to analyze total revenue and stock price trends of Tesla and GameStop, valuable insights for investors.
- Technologies: Python, BeautifulSoup, yfinance

Impact of Selected International HRM Practices on Expatriates' Job Performance

November 2023

- Identify factors influencing performance by conducting hypothesis testing and providing recommendations for improvement.
- Technologies: SPSS (IBM)

PUBLICATIONS AND OUTREACH

Conference Publication:

- V. Pussella et al., "QoS Aware Energy Efficient Vertical Handover Approach in LTE/WLAN Heterogeneous Networks", 2020 IEEE International Conference on Computing, Power and Communication Technologies (GUCON), New Delhi, India, 2020.

Medium Articles:

- "Dimensionality Reduction – Exploring Base Dimension Reduction PCA Technique for Going Forward in ML"
- "GitHub Actions CI/CD - Mastering MLOps Magic with GitHub Actions CI/CD"
- "Machine Learning Algorithms – Summary to Ensemble Learning"

AWARDS AND HONORS

Asia Pacific Region Galloping Horse Award- Project implementations and troubleshooting skills. **2023**

Asia Pacific Region Galloping Horse Award- Solving project rollout issues through reconciliation. **2023**

Asia Pacific Region Galloping Horse Award- Implementing tested products with no harm to the live network **2022**

Dolphin Life Saver Champion-Under 18 swimming champion of annual swimming events **2010**

CERTIFICATIONS

- Deep Learning Specialization (Deeplearning.AI)
- Unsupervised Learning, Recommenders, Reinforcement Learning (Deeplearning.AI),
- Applied Machine Learning: Ensemble Learning (Linkedin), Python for Data Science, AI & Development (IBM), SQL Essential Training (Linkedin), Databases and SQL for Data Science with Python (IBM)

TALKS

Guest lecture: Navigating Engineering Careers, General Sir John Kotelawala Defence University Sri Lanka **2023**

EXTRA-CURRICULAR ACTIVITIES

- Member of the Mathematics Society, Photography Society, Environment Society, and Music Circle in the school.
- Gym, Music, Driving in hill country, Swimming, Indoor cricket.