MADEE UTHTHARA GAMAGE

Email - madeeuththara@gmail.com
Mobile - 0417222486
Web site - https://uththara15.github.io

SUMMARY

A highly motivated ICT (Data Analysis & AI Specialized) Engineering student at Jyväskylä University of Applied Sciences with a strong foundation in data analysis, programming, and statistical modeling. Experienced in Python, SQL, and data visualization, with a proven track record of excelling in data related coursework. Passionate about leveraging analytical skills to derive insights and solve real-world problems.

EDUCATION

Bachelor's Degree in Information and Communications Technology — Aug 2023 - July 2026
Jyväskylä University of Applied Sciences – Jyväskylä, Finland

Completed 161 credits with Average grade - 4.45

Excelled in courses such as:

- Data Preprocessing, Analysis & Visualization (Grade: 5) – Hands-on experience with cleaning large datasets, performing statistical analysis, and presenting insights clearly.
- Introduction to Data Analytics & AI (Grade: 5) – Strong foundations in machine learning concepts, AI techniques, and practical analytical workflows.
- Databases & Full-Stack Programming (Grade: 5) – Skills in SQL, database design, and building applications that integrate backend data operations.
- Mathematics & Statistics (All grades 5) – Solid grounding in probability, discrete mathematics, linear algebra, and optimization, supporting analytical and model-evaluation tasks.

SKILLS

- Data Preprocessing & Text Cleaning – preparing, validating, and transforming large text datasets for LLM training, evaluation, and prompt experiments.
- LLM & Prompt Engineering Fundamentals – designing prompts, analyzing outputs, and improving reliability, accuracy, and factuality of language models.
- Evaluation & Analysis – assessing model performance, identifying hallucinations, biases, and inconsistencies, and generating actionable insights.
- Python Programming – strong experience with Python for data manipulation, automation, and building evaluation pipelines (NumPy, Pandas, scikit-learn, TensorFlow/PyTorch basics).
- SQL & Data Handling – querying, managing, and integrating structured data from relational databases for downstream analysis.
- Mathematics & Statistics – solid foundation in probability, statistical modeling, and analytical thinking useful for error analysis and model evaluation.
- Attention to Detail – ensuring accuracy, validating outputs, and spotting subtle issues in medical or clinical text.
- Communication & Collaboration – clearly documenting findings, explaining model behavior, and working closely with cross-functional teams.

LANGUAGES

- English: C1 - Advanced
- Finnish: A1 - Beginner

PROJECTS

Machine Learning — Voice Gender Classification (Autumn 2025)

- Built and compared multiple ML models (SVM, kNN, Decision Tree, Random Forest, PCA-based).
- Performed preprocessing, outlier handling, scaling, and correlation analysis.
- Computed feature importances and visualized insights using top explanatory variables.
  - Tech: Python, scikit-learn, Pandas, Matplotlib.

Deep Learning Final Project — AI vs Human Text Classification (Autumn 2025)

- Developed several deep learning architectures: BiLSTM, 1D CNN, GCU, Hybrid LSTM+Numeric, and Custom Transformer.
- Preprocessed and analyzed a 10k-text dataset; applied tokenization, padding, and class weighting.
- Evaluated models using accuracy, confusion matrices, ROC, and error analysis.
  - Tech: TensorFlow/Keras, NLP preprocessing, NumPy, scikit-learn.

CRISP-DM Analysis — European Soccer Dataset (Spring 2025)

- Applied the full CRISP-DM workflow: data understanding, cleaning, modeling, evaluation, and reporting.
- Performed hypothesis testing, feature engineering, and insights generation.
  - Tech: Python, SQL, Pandas, Seaborn, Matplotlib.

Data Analysis Project — Statistical Insights

- Conducted end-to-end data preprocessing, statistical analysis, and visualization of large datasets.
- Generated actionable insights and communicated results clearly.
  - Tech: Python, SQL, visualization libraries.

Financial Tracking Web Application

- Built a full-stack web app for expense tracking, reporting, and visual analytics.
- Implemented responsive UI and CRUD functionality.
  - Tech: React, JavaScript, Node.js, Express.js, MongoDB, HTML/CSS.

Car Consumption Monitoring App

- Developed a React-based web application for tracking and analyzing car fuel consumption.
- Implemented features for logging trips, calculating fuel efficiency, and visualizing usage trends.
  - Tech: React, JavaScript, HTML/CSS.