Lovera Lokeswara

+1 (437) 962 9755 | lovera.087@gmail.com | LinkedIn | Digital Portfolio

Education

University of Waterloo, Canada *Sep 2025 – Dec 2026*

Master of Data Science and Artificial Intelligence (Co-op Program), **Grade: 96**

- Relevant Coursework: Neural Networks, Optimization, and Deep Learning Model Development Lifecycle
- Waterloo AI Club Core Member: FlockRL (Reinforcement Learning Drones)

The Hong Kong University of Science and Technology, Hong Kong SAR *Sep 2021 – Dec 2024*

BSc in Data Science and Technology, **CGPA: 3.7 (First Class Honors)**, 2022 & 2024 Dean's List Scholar

Work Experience

Bridge AI Knowledge *Remote*

Software Engineer *Mar 2025 – May 2025*

- Designed and deployed a PDF Processing API (Python) with integrated LLM chatbot and automated parser to extract information from 100+ page documents, reducing processing time by 80% and enabling 5x higher document throughput.
- Built automated compliance report generator that benchmarks documents against client-specific checklists and provides recommendations which resulted in 95% audit accuracy and reducing report generation time by 95% (2 hours to 5 minutes).
- Developed WhatsApp customer service agent by integrating A1Base with N8N workflows, automating 100% of routine product inquiries and reducing average response time from 5 minute to 10 seconds while decreasing manual support workload.
- Created a voice AI agent using VAPI and ElevenLabs, implementing NLP pipelines for real-time speech understanding and enhancing customer experience while reducing call center expenses and average call resolution time.

Cathay Pacific Airways *Hong Kong SAR*

Data Scientist Intern *Jul 2024 – Aug 2024*

- Developed a Bayesian machine learning model using PyMC to analyze 55,000 user reports, enabling the engineering team to identify and prioritize key areas for issue resolution in Cathay's in-flight entertainment system.
- Created a solution to improve in-flight crew service effectiveness through smart wearable technology that leverages AI and machine learning algorithms with the goal of ensuring seamless interactions between cabin crews and customers.
- Acted as Project Manager for Cathay Hackathon 2024. Organized and led initiatives by adopting an agile approach with external partners (i.e., Huawei, Apple, Microsoft, Alibaba, Amazon) progressing the event significantly towards completion.

TradeLink Technologies *Hong Kong SAR*

Data Analyst, Business Intelligence *Jun 2023 – Aug 2023*

- Built a feature that allowed clients to access relevant news pertaining to their shipment status. Feature was developed through SEO practices which filters for news centered on a client.
- Researched and analyzed internal data to identify discrepancies in shipment and order records to ensure exact documentation of data within our client facing application.
- Visualized an upwards of 40,000 purchase order records through Pivot tooling to provide insights on possible process improvements and potential blockers which then allowed the business to focus on addressing pivotal areas.

Projects

Additional technical projects are archived in detail and can be accessed through: github.com/LoveraLokeswara

Optimization of a Gromov–Wasserstein Solver (Research)

- Formulated and analyzed the Gromov–Wasserstein optimal transport problem for low-dimensional point clouds, focusing on optimization strategies that guarantee globally optimal solutions.
- Optimized a Gromov–Wasserstein solver in Python (POT/OT, Gurobi) and evaluated global convergence on point-cloud benchmarks, achieving faster convergence and fewer iterations than public baselines.

Image Style Transfer Tool

- Implemented a DNN-based image style transfer model using TensorFlow and Keras to transfer artistic style between images.
- Applied the style transfer pipeline for data augmentation in an image recognition task, improving training data diversity.

Financial Sentiment Analysis using NLP

- Built a financial sentiment analysis pipeline using transformer-based models (FinBERT, BERT, RoBERTa) to classify financial text into positive, negative, or neutral sentiments, enabling nuanced market sentiment insights for investment and risk analysis.
- Evaluated model performance with detailed metrics (accuracy, precision, recall, F1) and developed an interactive Gradio interface for real-time sentiment prediction, facilitating quick interpretation of financial communication.

Leadership Experience & Skills

Extracurriculars: HKUST Student Ambassador, PPI-HK (Education and Cultural Development Committee), HKUST SEASA (Internal Division), HKUST Peer Mentor, University of Waterloo Indonesian Student Association

Technical Skills: Python, C++, MATLAB, R, MLflow, Power BI, SQL, Oracle, UI/UX, VBA, Streamlit, Econometrics, Regression Analysis, Statistical Modelling, Mathematical Modelling