LIM ZHAO WEI KENNETH   **Nationality: Singaporean**

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PROFESSIONAL SUMMARY

Results-driven AI Engineer with hands-on experience designing and deploying scalable AI/ML solutions across healthcare and public sectors. Specialized in Natural Language Processing (NLP), transformer-based models, and MLOps, with a track record of delivering automated, production-ready systems that reduce manual effort and improve decision-making. Skilled in cross-functional collaboration and quick in adapting to emerging technologies such as large language models (LLMs) and generative AI. Seeking AI engineer or AI Developer related roles to contribute and deliver high-impact solutions at the intersection of machine learning, software engineering and MLOps.

TECHNICAL SKILLS

Programming Languages: Python, SQL, Bash(Linux Shell Scripting), JavaScript

Frameworks & Libraries: Pandas, NumPy, Streamlit, Scikit-Learn, TensorFlow, PyTorch, LangChain, Huggingface, Kedro

Cloud, MLOps & Deployment: Docker, MLflow, FastAPI, Amazon Web Services (Sagemaker, Redshift, S3, Lambda)

Tools & Collaboration: Git, GitLab, Jira, Confluence, Tableau

ML Concepts: Supervised Learning, Ensemble Learning, Deep Learning, Natural Language Processing, Transformers, Recommender Systems, Large Language Models(LLM)

Development Concepts: Object-Oriented Programming, Agile Methodologies, CI/CD, Unit Testing

WORK EXPERIENCE

SkillsFuture Singapore – AI/ML Engineer   **Jan 2025 – Present**

- Architected and deployed a scalable MLOps pipeline powered by transformer-based NLP models to automate skill extractions from job postings and course descriptions across Singapore government platforms, reducing manual tagging effort by **35%** and turnaround time by **2 weeks**.
- Established ML deployment SLAs incorporating pre-production testing and controlled rollouts, reducing deployment-related issues by **25%** and accelerating validation cycles for enterprise-wide model releases.
- Collaborated across software, model development and data engineering teams to identify and fix critical deployment bottlenecks, improving model test pass rates by **17%.**
- Onboarded and mentored ML engineer interns on software engineering best practices for building production-ready, scalable ML pipelines on AWS SageMaker.

AI Singapore – AI Engineer Apprentice   **Jan 2024 – Oct 2024**

- Designed and developed two-stage ML pipeline that automated treatment classification and diagnosis prediction for a local healthcare institution, reducing manual workload and improving efficiency in clinical workflows.
- Engineered an advanced Named Entity Recognition(NER) system by fine-tuning and optimizing a cutting-edge language transformer model to extract and precisely predict infection diagnoses from medical reports, achieving an average **25%** improvement in F1 score post fine-tuning.
- Co-developed a boosting classification model integrating NER predictions and clinical features to enhance efficiency and responsiveness and medical intervention planning
- Containerized ML pipelines using **Docker** and **MLflow** to unify data ingestion, model training and inference with an integrated **FastAPI** layer to enable scalable deployment, robust experiment tracking and explainable real-time predictions

GLOBALFOUNDRIES Singapore Pte Ltd – Process Integration Engineer   **Mar 2020 – Feb 2023**

- Collaborated across engineering departments to oversee Continuous Improvement Projects, employing statistical data analysis to enhance process robustness and achieved **10%** reduction in troubleshooting time across different semiconductor devices.
- Evaluated the electrical performance of semiconductor chips by carrying out correlation analysis using JMP statistical tool and Excel that amounted a total cost reduction of **USD 4500.**

PROJECTS

End-to-end Machine Learning Pipeline for prediction of Private Property Prices

- Developed an **end-to-end ML pipeline** for private property price prediction, unifying data ingestion scraped from URA API, preprocessing, model training, and deployment.
- Deployed the model with **FastAPI** backend and containerized pipeline via **Docker** for scalable, reproducible inference.

EDUCATION

Nanyang Technological University, Singapore   **2015 – 2019**

- **Bachelor of Engineering in Materials Engineering (Honours with Distinction)**
- Academic Achievements: **Certificate of Distinction for Professional Internship** by School of Materials Science of Engineering (Nanyang Technological University, 2019)

CERTIFICATES AND ADDITIONAL INFORMATION

General Assembly Data Science Immersive, Singapore   **Feb 2023 – Apr 2023**

- Specialized in feature engineering, supervised and unsupervised learning, natural language processing, recommender systems, and big data with an emphasis on Apache Spark and PySpark**.**

Chartered Associate AI Engineer, AI Singapore   **Jan 2024 – Mar 2024**

- Developed knowledge and expertise in state-of-the art AI techniques and technologies such as Machine Learning Operations(MLOps), Natural Language Processing(NLP), Large Language Models(LLM) with areas of focus:
  NLP: Transfer Learning, Transformer architectures (BERT, GPT, T5), Text Classification, Sentiment Analysis
  LLM: Retrieval-Augmented Generation(RAG), Zero-Shot Learning, Few-Shot Learning, Chain of Thought, Prompt Engineering, Question Answering, LangChain, OpenAI

Languages: English, Chinese