

Terence Chow

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Career Objective: Machine Learning Engineer, AI Developer, Software Engineer

"Passionate AI developer committed to optimizing business workflows with innovative machine learning models and leading-edge technological solutions."

PROFESSIONAL SUMMARY

- Dedicated Machine Learning Engineer with 2+ years of hands-on experience in AI model development, deployment, and monitoring.
- Master of Science (M.Sc.) Degree in Computer Science, specialized in Artificial Intelligence.
- Strong collaboration skills, effectively working with cross-functional teams.
- Solid interpersonal, verbal, and written communication abilities used to build relationships with co-workers, and to communicate technical information clearly and concisely.
- Work well independently with minimal supervision and as a productive, efficient team player.
- Experienced in coordinating and documenting workflows within Agile environments, using JIRA and Confluence to streamline project management.

TECHNICAL PROFICIENCIES

- **Python ML Libraries:** Scikit-Learn, NumPy, SciPy, Matplotlib, OpenCV, Pandas
- **DL Library:** PyTorch, Keras, TensorFlow
- **Algorithms and Model:** PCA, KNN, K-Means, SVM, Decision Trees, CNN, DNN, RNN, LSTM, BERT, Transformer
- **MLOps:** MLflow, Optuna, Ray, Git, Gitlab, CI/CD, Docker, Kubernetes, Jinja,
- **Tools:** Bash, Linux, VIM, Jupyter Notebook, VS Code, Power App, Power BI
- **Database and Data Engineering:** SQL (Snowflake/ MySQL/ Oracle DB), NoSQL (DynamoDB, Firebase), Airflow, DBT
- **Cloud Computing:** AWS (EC2, S3, Lambda, Rekognition, API Gateway, Bedrock), GCP (Cloud Function, BigQuery, Firebase, GKE)
- **Web Development:** JavaScript, HTML5, CSS3, TailwindCSS, TypeScript, ReactJS, NextJS, FastAPI, RESTful APIs, Flask, Vercel

WORK EXPERIENCE

IT Project Specialist

10/2023 - Present

Coop Far East Ltd. (Supply Chain for Italy's Largest Retailer)

Remote/ Hong Kong

- Developed 2 Power Platform solutions and 3 dashboards within 2 quarters, communicating with stakeholders to gather requirements, ensuring successful delivery and continuous reviews.
- Collaborated with finance to digitize the travel expense claim process for 50+ users by building a Power Canvas App, boosting efficiency by 13%, and processing 40+ trips in 2023.
- Organized data structures of travel expenses, building a Power BI report. Improved budget management efficiency by 15% by enabling the monitoring of budgets.
- Automated data collection and processing of 100k+ product data monthly from 30 competitors using web scraper tool and AWS Lambda, systematically integrating data into SharePoint.

WORK EXPERIENCE (CONTINUED)

AI Developer I

09/2022 - 08/2023

Intact Financial Corporation (Largest P&C Insurance Company in Canada)

Toronto, ON

- Improved efficiency by 3% for the claim department's quality control by cosmetically upgrading the performance dashboard and adding Power BI visualizations.
- Developed Power BI dashboards to monitor model performance, setting daily alerts to detect issues, leading to faster issue resolution with MLOps and DevOps teams.
- Assessed post-development performance of the HuggingFace model using MLflow, documenting findings and identifying specific areas for improvement in future iterations.
- Implemented MLOps best practices by writing 30+ unit tests with PyTest and achieving 95% test coverage, enhancing the reliability of the transformer model.
- Transformed a disorganized Snowflake environment by renaming 50% of queries and views, reducing confusion, and improving development efficiency and code reviews.

AI Developer Coop

05/2022 - 09/2022

Intact Financial Corporation (Largest P&C Insurance Company in Canada)

Toronto, ON

- Automated data extraction and prediction processes using Airflow in 2 weeks, creating UML diagrams, setting up Airflow DAGs by Jinja, saving 1 hour of manual daily work for data scientists.
- Evaluated the Large Language Model performance in generating synthetic emails by examining quality results and testing on resource usage. Presented findings for future research.
- Implemented a feature in a CLI tool for users to track storage usage on a Kubernetes cluster, reducing support queries by 7% and enhancing resource management for 1000+ users.

Software Engineer

12/2021 - 05/2022

Arima (Marketing SaaS, Startup)

Toronto, ON

- Enhanced efficiency of synthetic data generation by reducing the processing time of a TensorFlow-based machine learning model by 30% through feature selection, vectorization, and the implementation of multiprocessing techniques.
- Generated synthetic data using a pre-trained model and the latest census data, set up AWS EC2 for processing bash scripts, and integrated output with GCP BigQuery via APIs.
- Optimized the code base of an ML system, significantly improving maintainability, readability, and scalability by refactoring and modularizing

Graduate Research Assistant

09/2019 - 08/2021

Lakehead University, Computer Science Department

Thunder Bay, ON

PROFESSIONAL CERTIFICATIONS

Microsoft Specialization - Microsoft Power Platform Fundamentals

06/2024

Google Certification - Introduction to Generative AI Learning Path

06/2024

EDUCATION

Master of Science (M.Sc.) Degree in Computer Science, specialized in Artificial Intelligence**2021**

Lakehead University

Thunder Bay, ON

Bachelor of Engineering (B.Eng.) Degree in Electricity Engineering (Honours)**2019**

City University of Hong Kong

Hong Kong