

LEON TAN

Singaporean

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Websites:

[GitHub](#)

[LinkedIn](#)

SKILLSETS

❖ LANGUAGES

Python, Java, C, C++,
C#, Bash

❖ DATABASES

SQL, NoSQL,
PostgreSQL, MongoDB,
Elastic-search

❖ DISTRIBUTED COMPUTING

Hadoop, Hive

❖ AUTOMATION

Airflow

❖ CLOUD

Azure, Amazon Web
Service (AWS), Google
Cloud Platform (GCP)

❖ DEPLOYMENT TOOLS

Docker, Kubernetes,
GitLab-CI

❖ MACHINE LEARNING

Scikit-learn, TensorFlow,
PyTorch

❖ WEB DEVELOPMENT

HTML, JavaScript, CSS,
jQuery

EXPERIENCE

Data Engineer

APR 2021 - PRESENT

Synthesis Partners, Singapore

- ⌚ Engineered classification tool bar to facilitate market research:
 - Loading of data into Elasticsearch with custom analyser
 - Using FastAPI to create API endpoints to manage Elasticsearch data
- ⌚ Developed pipeline to put machine learning model into production:
 - Using of FastAPI to send data and retrieve model prediction
 - Hosting BERT model with Google Compute Engine to utilise GPU
- ⌚ Developed and maintained new ETL pipelines, reducing data extraction lead time by >60%:
 - Using of FastAPI to create API endpoints
 - Serving a queue system with Celery, RabbitMQ and Redis
 - Using multithreading to accelerate data extraction process
 - Unpacking and validating data before loading into data lake

Associate Research Officer

NOV 2020 – APR 2021

A*STAR Bioprocessing Technology Institute (BTI), Singapore

- ⌚ Engineered microfluidic channel simulation of multiphase laminar flow and analysed results to develop novel biomanufacturing technology.

R&D Process Engineer

AUG 2017 – OCT 2020

Nanofilm Technologies International, Singapore

- ⌚ Employed Python for data analysis of machine learning process records resulting in key process changes that increase coating production efficiency.
- ⌚ Project: Solenoid Magnetic Field Simulation
 - Developed simulation representing magnetic interference between multiple current-carrying wire coils.
 - Fine-tuned with real-life measurements.
 - Initiated patented machine upgrade that reduced power used by 35% through insights gathered.

CERTIFICATES

- ❖ M100: MongoDB for SQL Pros
MongoDB
- ❖ Associate Cloud Engineer
Google
- ❖ Developing AI Applications on Azure
Coursera
- ❖ Automate the Boring Stuff with Python Programming
Udemy
- ❖ Getting Started with AWS Machine Learning
Coursera
- ❖ AWS Computer Vision: Getting Started with GlueCV
Coursera
- ❖ Machine Learning for Business Professionals
Coursera
- ❖ Python (Basic)
HackerRank
- ❖ Problem Solving (Basic)
HackerRank

LANGUAGES

- ✓ English (Native)
- ✓ Chinese (Native)

ADDITIONAL INFO

- 🕒 1 Month Notice

EDUCATION

Nanyang Technological University AUG 2013 – JUL 2017

Bachelor of Engineering with Honours (First Class Honours)
Materials Engineering, Specialization in Industrial Material Engineering
CGPA: 4.68 / 5.00

- 🕒 Awarded College Scholarship.
- 🕒 Relevant Courses: Computing, Management Decision Tools

Linköping University AUG 2015 – JAN 2016

Exchange Programme in Linköping, Sweden

- 🕒 Relevant Course: Semiconductor Technology

PROJECTS

Kaggle: Rock Paper Scissors Agent DEC 2020 – FEB 2021

- 🕒 Utilized multi-armed bandit algorithm to select between strategies to compete and outperform opponent's agents and attained top 5% in Kaggle rankings.
- 🕒 Implemented machine learning models, such as Decision Tree Classifier and XGBoost.

Stocks NN Prediction MAY 2020 – JUN 2020

- 🕒 Designed scraper to extract stock data from Yahoo Finance and predict the best opportunity to buy/sell stocks.
- 🕒 Applied Pandas Datareader to scrape stock data based on stock ticker code provided.
- 🕒 Employed PyTorch to formulate neural network for prediction.