Dongwoo **Han**

SOFTWARE DEVELOPER · BACK-END ENGINEER

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"Good programmers write code that humans can understand"

Skills

Back-end	Django, Flask, FastAPI, NodeJS, Node.js, MongoDB, PostgreSQL
Database	MongoDB, PostgreSQL, MySQL
Data Science	NLP, SpaCy, PyTorch, ScikitLearn, Pandas, NumPy
Front-end	HTML, CSS, JS
Programming	Python, JAVA, JS
Languages	Korean, English, Chinese

Work Experience

SAP Asia — *Singapore, Singapore*

FULL STACK DEVELOPER INTERN — *August. 2021 - Dec. 2021*

- Worked as a Scrum Master in an agile CI/CD environment using Jira, Jenkins and Github
- Developed bug fixes inside a Web application built with Flask and a PostgreSQL DB running under CloudFondry.
- Built test-cases using PyTest and verified codes through Unit Test and E2E test using tools such as Postman and Kibana.
- Delivered quality codes through detailed documentation and QA tools such as SonarQube.

School of Economics, NTU — *Singapore, Singapore*

STUDENT ASSISTANT — *May. 2021 - Aug. 2021*

- Developed a simulation tool for the Multi-prisoner's Dilemma using Python.
- Built multiple strategies that and evaluated performance of each strategy.

Education

NTU(Nanyang Technological University) — *Singapore, Singapore*

B.E. IN COMPUTER SCIENCE — *Aug. 2017 - Dec. 202*

- CPGA: 4.61/5.00 (Expected: Highest Distinction)

Projects

Sentiment-based Business News Analyzer — *Uni (Information Retrieval)*

BACK-END DEVELOPER, DATA SCIENTIST — *Feb. 2022 - Apr. 2022*

- Extracted 20000 news articles using BeautifulSoup and Newspaper3K and store them inside a search engine, Solr.
- Fine-tuned RoBERTa model on SpaCy for NER and DistilBERT model on HuggingFace for Sentiment Analysis.
- Achieved an accuracy of 85% and built a demo Web application using Streamlit of the ML models built.
- Link: https://github.com/matthanmethane/news_analyze_sentiment

Optimizing epidemic spread using Deep Reinforcement Learning — *Final Year Project*

DEVELOPER — *Jan. 2022 - Ongoing*

- Built a simulation for COVID-19 using the SEIR model by replicating the R-value in reality using Python and OpenAI's Gym Environment.
- Utilized Stae-Of-Art Deep Reinforcement Learning models such as DQN, DDQN and PPO and evaluated them to find the best performing model.
- Link: https://colab.research.google.com/drive/1fyEhJvgLziTe_Ewx_eqRbmeHpFPJLJWI

Websocket Live Ban/Pick Simulator of League of Legends — *Personal Project*

DEVELOPER — *Mar. 2022*

- Spent one day to understand Websocket by building a real-time update application using Websocket, FastAPI Server and JavaScript Client
- Link: https://github.com/matthanmethane/lol_ban_pick

Course Planning Website — *Uni (Adv. Software Engineering)*

LEAD DEVELOPER — *Dec. 2020 - Apr. 2021*

- Implemented the course schedule scraping and planning algorithm using Python.
- Developed back-end REST API using Flask and utilized the finished work to automate the course scheduling.