# Kaiyuan Wei

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#### **EDUCATION**

Northeastern University, Boston, MA

Jan 2021 - May 2023

Khoury College of Computer Sciences

GPA: 3.54/4.0

Master of Science in Artificial Intelligence

courses: Machine Learning, NLP, Information Retrieval, OOP, Algorithms, AI Ethics

Northeastern University, Boston, MA

Sep 2018 - Aug 2020

Bachelor of Science in Information Technology

GPA: 3.72/4.0

courses: Data Analysis, Java, Database Websites, Web & Mobile Development, MySQL

## **SKILLS**

Language: Python, Java, R, JavaScript, C++, SQL

ML Tools: Jupyter Notebook, Google CoLab, AWS SageMaker, TensorFlow, Keras, PyTorch, SK-learn, NumPy,

Pandas, Matplotlib, Seaborn

Models: XGBoost, Decision Tree, Random Forest, SVM, KNN, MLP, PCA, RNN, LSTMs, GRU, Attention,

Transformer, BERT, spaCY, NLTK, CNN, ResNet, ResUNet

Data Tools: MySQL, Mongo DB, Redis, Elasticsearch, Scrapy, Docker, Ubuntu/CentOS

Web Tools: Flask, Django, BootStrap, Ajax, React, TypeScript, HTML/CSS

Certificate: AWS-Certified Machine Learning Specialty, Udemy-Elasticsearch and Elastic Stack

## **Working Experience**

Full Stack Engineer | Napa Reserve Wines (Shanghai, China)

Jun 2013 - Jan 2018

- Adopted dynamic technique (JavaScript/CSS/jQuery) for company website;
- Designed and implement the backend structure of website using Python & Django;
- Improved performance of SQL server by balancing I/O workload & add slave server;

## **PROJECTS**

# Vertical Search Engine [link | code]

Apr 2023

- Rapidly scraped large number of webpages using multiple threads, stored result in Elasticsearch;
- Designed interface to retrieve and analyze docs from ES that related to query terms.

## **Q&A** ChatBot [link | code]

Dec 2022

- Integrated End-To-End Network with LSTM model to achieve a Q&A ChatBot;
- Deployed trained model with Flask on webpage, achieved interactive inference;
- Run the project application as a system service on Ubuntu OS.

## Health Prediction [link | code]

Nov 2022

- Transferred unstructured data from sensor record into tabular format data for ML algorithm;
- Achieved online inference by deploying project on AWS EC2 instance.

## Movie Recommend Model [link | code]

Nov 2022

- Reduced size and enhance speed of the model by using Item-CF info only;
- Recommended movies according to cosine distance between query and stored dataset.

## **ACTITITIES**

course: Elasticsearch and the Elastic Stack (Udemy)

course: Intro to TensorFlow for Deep Learning (Udacity)

course: Natural Language Processing with Python (Udemy)