# **DAIHUI DOU**

(347)987-5493 | <u>dd2956@nyu.edu</u>

## **EDUCATION**

New York University, New York, US 09/2019-06/2021

MS in Computer Science CGA: N/A

Hong Kong University of Science and Technology, Hong Kong 09/2015-06/2019

B.Eng in Computer Science CGA: 3.414/4.300

University of Minnesota, Minneapolis, US 09/2018-12/2018

Exchange Program CGA: 3.513/4.000

#### RESEARCH & PROJECT EXPERIENCE

## Quantitative Trading System with Text Mining at HKUST

09/2018-05/2019

- Final Year Project supervised by Prof. Dik-Lun LEE, Department of Computer Science and Engineering, HKUST.
- Build a Reinforcement Learning with Text Mining system to predict and trade stocks. Stock prices and relevant financial news are crawled from webpages as the training and test data.

#### Siamese Neural Network for One-shot Learning at HKUST

02/2019-05/2019

• The project is to improve Siamese Neural Network (SNN) for one-shot learning on colored dataset (Caltech 101). Our group introduced self-attention mechanism to SNN and achieved an improvement of 23% on accuracy.

#### Automated Essay Grading at University of Minnesota

10/2018-12/2018

• The project is to develop an automated machine learning algorithm to grade student essays, using the dataset provided by Kaggle. Our group implemented the algorithm using tf-idf vectorization followed by multi-layer LSTM model.

## Indoor Localization and Mobile Computing at HKUST

06/2018-08/2018

- Research project supervised by Prof. Shueng-Han Gary CHAN, Department of Computer Science and Engineering, HKUST.
- Responsible for data processing programs in Python that implement an automated workflow to generate Wi-Fi fingerprint map from raw data through REST API of the data server.

## Web Crawler & Search Engine at HKUST

02/2018-05/2018

- Crawl text of thousands of webpages and construct the database including inverted indices of each stemmed word and other information.
- Build a search engine that can retrieve webpages based on user-input keywords, sorted by relevance scores in descending order.

## **WORK & INTERNSHIP EXPERIENCE**

Web Development Internship at Entrepreneurship Center, HKUST, Hong Kong 01/2018-02/2018

- Write new webpages and update information for a business competition based on original pages. Rewrite the old webpages using *Laravel* framework.
- Learned Laravel PHP web framework. Used JavaScript, HTML and CSS.

#### LANGUAGE & TECHNICAL SKILLS

- Programming: C++, Python, Java, SQL, HTML, CSS, JavaScript, PHP
- Others: Linux/Unix, TensorFlow, Keras, D3.js, Latex, Visual Studio, MySQL, Microsoft Office
- Languages: Mandarin (native), English (proficient)

## **AWARDS & SCHOLARSHIPS**

- University's Scholarship Scheme for Continuing Undergraduate Students from HKUST, 2016
- Dean's List from HKUST, 2016