

GitHub: https://github.com/CoreJa | Personal blog: https://coreja.com/ Tel: +1-202-517-3840 Email: i@coreja.com

Addr: 1021 Arlington Blvd, VA-22209, US

#### **Education**

## 08/2021 ~ Now Georgetown University

Graduate School of Arts and Sciences

- Major in Computer Science
- Pursuing a Master of Science degree
- Anticipated Graduation Date: 05/2023

# 09/2015 ~ 06/2019 Wuhan University of Technology (WUT)

School of Computer Science and Technology

- Major in Computer Science and Technology with GPA 3.74 out of 4.0
- Bachelor of Engineering awarded in June 2019
- 3<sup>rd</sup>-level Scholarship in 11/2018, 2<sup>nd</sup>-level Scholarship in 11/2017

#### **Thesis**

#### 02/2019 ~ 05/2019 Graduation Thesis

Subject: Improvement of Object Detection Algorithm YOLOv3

- Conducted the study of feature extraction backbone network and feature interaction network of YOLOv3, and the implementation based on PyTorch
- Proposed improvement ideas concerning the model's YOLO layer and the dataset objects
- Evaluated accuracy of the improved algorithm via the calculation standard of MS COCO mAP-30
- Reached an improved algorithm with 1.65 times mAP and completed a thesis selected as one of the five university-level excellent graduation thesis

#### **Experience**

## 10/2020 ~ 05/2021 Work at CMB YunChuang Technology(cmbyc.com)

Position: Data Development Engineer

- Developed and maintained database (MySQL mainly)
- Exporting report forms from databases
- Developed back-end program of a web project called Cloud Map using Django (at Demo phrase)

## 03/2018 ~ 08/2018 2018 China University Student Design Competition

Subject: Internet news classification and recommendation system

- Constructed a character-level CNN news classification model
- Crawled five billion new data and vectorized the text data
- Trained the model and achieving a classification accuracy of 90%
- Designed and developed database, web back-end, and front-end interaction via comprehensive implementation of spring boot, redis and mongoDB
- Fulfilled the system based on big data platform with group and became one of the five National 1st Prize winning groups in the Software Service Outsourcing

# 03/2018 ~ 02/2019 National Undergraduate Innovation and Entrepreneurship Training Program

Subject: Book recommendation system based on book review content

- Pre-processed data regarding text segmentation, de-stopping words, etc.
- Trained tag library word embedding model with word2vec (Chinese Wikipedia corpus)
- Extracted book review keywords using tf-idf and contributed to the design of tag sets and the algorithm calculating correlation between tag sets
- Developed the system "Shu Yun", applied for an invention patent, and approved as a National level project
- Submitted to the 1<sup>st</sup> "Big Data Innovation" competition and won the 2<sup>nd</sup> Class Prize
- Applied for a National Invention Patent (Application No.# 201910109797.1)

# 03/2017 ~ 02/2018 National Undergraduate Innovation and Entrepreneurship Training Program Subject: A research on a consumer review utility model

Assumed the Group Leader and coordinated the group's work throughout the project

- Determined four review evaluation dimensions of timeliness, length, sentiment analysis, and product attributes
- Calculated emotional intensity based on sentiment vocabulary
- Obtained product attributes via training word embedding model with word2vec and extracting top 10 keywords with tf-idf
- Quantified features according to number of feature words and used as input into fuzzy hierarchical comprehensive evaluation model
- Trained model with supervised learning mode and approved as a University-level project

#### Miscellaneous

- Skills: Python, Java, C++, Shell script, SQL
- Open source projects: KDE event-calendar translation; Bug fix for ShareJS on static page; Bug fix for CSDN blog to markdown; Bug fix for Hexo blog image insertion
- WUT Open Source Technology Association since 09/2016: Association president from 05/2017 to 05/2018
- Video tutorials: Manjaro Linux configuration et al. (32,000 Playbacks as of 11/30/2019)
- WUT School of Computer Science and Technology Debate Team: Member