

Hengchao(Derrick) Wang

Arlington, TX | (817)-821-1725 | whc0721a@outlook.com

EDUCATION

M.S. in Computer Science, The University of Texas at Arlington, GPA: 4.0/4.0

Aug,2019-Jul,2020

M.Eng. in Software Engineering, Beijing University of Posts and Telecommunications, GPA:85/100

Sep,2017-Jun,2020

COURSEWORK

Artificial Intelligence, Algorithm, Software Engineering, Data Structure, Principle of Operation System, Basis of Computer Network, Principle of Computer Organization and Structure

INTERNSHIP

China Telecom Beijing Research Institute

Aug,2018-May,2019

-Algorithm developer and Software engineer interned for 10 months.

- Implemented Named Entity Recognition (NER) Algorithm development. Analysis of the police record data get crime name, address, and some other information. Using **LSTM** network to Determine entity's boundaries and **CRF** to get the Category of entity.

- Implemented Graph Storage and Clustering Algorithms development. To analyze, storage and cluster the entity after NER algorithm analysis. Implement **Force Atlas**, **Spectral clustering** and Visualization by **Gephi**. Using **Python**, and **Neo4j** database.

-Emotional Analysis of News Text development. Using google bert_zh_L-12 pretraining model. Based on **Transfer Learning** Algorithms.

-Using **Python, Flask, Docker, Java**, and **Tensor-flow**.

Beijing Judao Youda Network Technology Co, Ltd.

May,2018-May,2019

-Intern lecturer interned for 12 months.

-Participate in the company's curriculum design. Teaching Informatics contest courses(Algorithm and Basic syntax format).

-Teaching data structure and Algorithm for high school students. Using **C++** language.

Suzhou Gaobo Inno Information Technology Co, Ltd.

Aug,2016-Oct,2016

-Software engineer interned for 3 months.

-Participated in Commodity Management Software development. Designed the management back-end system. Implemented the Database operations and enter, delete, display goods. Based on **Spring-boots, MySQL**. Using **Java** language, **Lombok, JPA** and some other Plugin.

PERSONAL PROJECTS

Instant Messaging Software

Sep,2017-Jun,2018

-Laboratory project, a Instant Messaging Software for small companies.

-IM instant messaging software Android client and background development. Achieve messaging function and put the product online.

-Android client implement group chat, chat and friend management. Using **MVC** coding model, **SQLite** database. Using **GridView** and **GridLayout**, etc. Solve Data synchronization issues by adding **Timestamp**.

-In background system, implement Message forwarding, message and user management. Using **Java, Tcp Socket** and **Http protocol**. Using delayed queue, detached Picture server and design the timeout or retry mechanism to improve performance of high concurrent requests.

Battery fault diagnosis project based on NASA data

May,2018-Jul,2019

-Laboratory project. Study battery loss curves and predict whether aging. Based on battery aging data.

-Using **Tensor-flow** tools and design **RNN-LSTM** neural network model.

-The initial data is from NASA laboratory data. Using battery aging data to train the model.

-Finished model and get more than 95% accuracy. Complete project review.

National College New Energy Vehicle Big Data Application Innovation Competition

Jul,2018-Aug,2018

-Complete the problem: Electric vehicle mileage prediction. Training model to predict battery status and scrapped.

-Using Battery using environment and charge and discharge parameters data, predict by **LSTM, XGboot** and **Gauss process regression**.

-Get the top 25 of the innovation group.

SELECTED ACADEMIC PROJECTS

News Management System

Sep,2019-Dec,2019

-A course project in Software Engineering at UT-Arlington. Designed a News Management System.

-Defined three kinds of user with three authority including manager and user.

-Developed functions such as add or delete news, comment news, manage users and news classification, etc.

-Implement the back-end of the system by using **Spring-boot, Java**, and **MySQL** database technologies.

-Implement the front-end of the system by using **Layui** framework, and **Ajax** asynchronous HTTP request.

SKILLS

Languages: Python, Java, C++, SQL

Tools: PyCharm, IntelliJ IDEA, Git, Maven, Android studio, VMware, Visual Studio

Platforms: Windows, Ubuntu, Android

AWARDS AND VOLUNTEER EXPERIENCES

Awards: Postgraduate Academic Scholarship three times, Undergraduate scholarship twice, National College New Energy Vehicle Big Data Application Innovation Competition top 25. Internet plus Innovation and Entrepreneurship Competition Provincial Silver Award.

Volunteer Experiences: UTA Chinese Class Volunteer, IBCA Church Volunteer