Haozhe **Wang**

OBJECTIVE: I AM SEEKING FOR A 2019 SUMMER INTERN IN SOFTWARE ENGINEER

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Education

CARNEGIE MELLON UNIVERSITY(CMU)

Pittsburgh, PA

M.S. IN INFORMATION TECHNOLOGY – MOBILITY — *Aug. 2018 - May. 2020*

- Courses: Intro to Computer System, Search Engine, Distributed System, Web Application, Information Security
- Awards: Merit Scholarship GPA: 3.6/4.0

BEIJING UNIVERSITY OF POSTS AND TELECOMMUNICATIONS(BUPT)

Beijing, China

B.ENG. IN INTERNET OF THINGS ENGINEERING — *Sept. 2013 - June. 2017*

- Courses: Operating System, Data Structures, Computer Network, Database System, Cloud Computing
- GPA: 4.0/4.0 **ranked 1/118**
- Awards: Beijing Outstanding Graduate (2017), National Scholarship **1/118 (three times)**, Beijing Merits Student **2/638**(2015), Special Awards in National College Student Innovation and Entrepreneurship Competition **(3/1148)**

Skills

Language Python, JAVA, C, SCOPE, SQL, JavaScript, HTML, PUG, CSS, C#

Tools / OS Linux, Git, AWS, MySQL, Android, Hadoop, Django, VUE, Bootstrap, TensorFlow, Pytorch

Work Experience

MICROSOFT RESEARCH ASIA (MSRA)

Beijing, China

MACHINE LEARNING INTERN — *Nov. 2017 - Apr. 2018*

User Interest Classification Based on Searching and Browsing Data

- Extracted user browsing & searching information on **COSMOS** platform and processed with **SCOPE** and **C#**
- Proposed and implemented a two-tier hierarchical attention-based deep learning model by **Python** and **TensorFlow**
- Tested the performance with the constructed dataset and outperformed state-of-art model 1.10% in several metrics
- Submitted to the top conference in natural language processing track of **AAAI** with the first author

Product Comment Auto-Analysis Tool

- Designed a classifier based on the Bi-LSTM through the **Pytorch** and **Python**
- Tested the model with real-world data and achieved the accuracy of 90% in more than 30 classes
- Launched in Microsoft Shanghai, and improved the efficiency in comments filtering

NEBULA LINK INC

Beijing, China

SOFTWARE DEVELOPMENT ENGINEER INTERN — *Oct. 2016 - Nov. 2017*

Auxiliary Driving System based on Intelligent Vehicle Infrastructure Cooperative System (I-VICS)

- Applied anti-collision and speed guidance algorithms developed at Tsinghua University in I-VICS system
- Made prototypes and functions of the application by utilizing **Axure**
- Designed and developed an **Android** app based on **MVC** pattern, which retrieves data in **JSON** format
- Completed the Autonomous Vehicle Driving testing on urban roads in Anhui Province

University Campus Shuttle Project

- Proposed an idea of developing a mobile application to provide school students with customized shuttle service
- Designed system with **Visio**, implemented the architecture using **MVC** structures and several design patterns
- Implemented the whole system in **JAVA**, specially the scan module with **Zxing** and data transfer via **REST API**

TSINGHUA UNIVERSITY

Beijing, China

RESEARCH ASSISTANT; PROFESSOR: DANYA YAO — *June. 2015 - Oct. 2016*

Research on Key Technologies of I-VICS

- Proposed the data transmission protocol between Road-Side Units (RSU) and On-Board Units (OBU)
- Implementation the anti-collision and speed guidance algorithms and tested the performance with MATLAB

Selected Projects

YEStes–Speech2Text based Sharing Notes Web Application

Pittsburgh, U.S.A

TEAM LEADER — *Sept. 2018 - Dec. 2018*

- Built the notes sharing website allowing users to write notes, highlight codes and commenting others' notes
- Implemented the front-end by **PUG**, **CSS**, **JavaScript** based on **VUE** framework
- Used **Django**, **Python** to implement the backend and **Ajax**, **Restful API** and **VUE Router** for data transmission
- Applied **Google Speech2Text API** and **WaveSurfer.js** to implement audio interface and speech to text translation

Searching Engine

Pittsburgh, U.S.A

INDIVIDUAL PROJECT — *Sept. 2018 - Dec. 2018*

- Implemented the retrieval algorithms of RankedBoolean, **Indri**, Okapi **BM25** based on **JAVA** and **Lucene** library
- Conducted experiments with 588146 documents and increased diversification with **xQuAD** and **PM2** algorithms
- Incorporated query expansion and Learning-to-Rank algorithm to improve mean precision from 13.7% to 22.3%