Yating Wu

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The University of Texas at Austin yating.wu@utexas.edu (+1)313-652-3549

#### **EDUCATION**

The University of Texas at Austin(GPA: 3.92/4.00)

Austin, TX

M.S./Ph.D. in Electrical and Computer Engineering

Jan. 2020 - Now

Supervisor: Prof. Jessy Li and Prof. Alex Dimakis

Research Interset: Natural Language Processing, Text Elaboration, Multilingual, Grammatical Error Correction

Related courses: Research in Computational Linguisitic, Spoken Language Technologies, Machine Learning, Data Mining, Distributed Systems, Multicore Computing, Operating System

Dalian University of Technology (GPA: 91, Ranking: 1/45)

Dalian, China

B.Eng. in Computer Science & Technology and B.A. in Japanese (5 year degree)

Sept. 2014 - July 2019

Related courses: Object-oriented Programming, Data Structure and Algorithm, Compile Principles, Computer Networks
The University of Tokyo
Tokyo, Japan

Undergraduate Exchange Student in Information & Communication Engineering

Sept. 2017 - Aug. 2018

Studied and Researched at Aizawa Yamasaki laboratory

Related courses: Programming Languages, Operating Systems, Computer Architecture

#### WORKING EXPERIENCE

Amazon Austin, TX

Software Develop Engineer Intern

June 2021 - Sept. 2021

- Implemented a Ranking System for ranking the events based on its popularity, by Java. I wrote over 10,000 lines java code and over 97% coverage.
- Designed and Implemented a Ranking Data DynamoDB table for saving viewership data and filter events, Java.
- Set up Lambda to automatically pulling and putting latest information to Database, by Java.
- Contributed to the main team repository to sort events based on viewership data, Java.
- Ingested with inner service to create two new carousals to provide this service for new customers, Java.

# RESEARCH & PROJECT

Investigating inverse problem in speech adaptation through invertible neural network

-Developer

Oct. 2021 - Dec. 2021

- Generated motor commands(articulator parameters), their formant frequencies and corresponding bandwidths pairs with Maeda vocal tract synthesizer as dataset, by **Python**.
- Set up invertible neural networks to infer the parameters and validate the correctness by replicating examples given by Ardizzone, by Python.
- Tuned on different settings and used 3 metrics to evaluate the model MSE loss of forward process, MSE loss of inverse process, validity of parameters.
- Got a best result of forward process MSE 250.80HZ, inverse process MSE 214.73HZ, inverse parameter validity 95.5%.

### Semantic Search Engine and QA System Based on COVID-19 Dataset

Austin, TX

-Lead Developer

Mar. 2020 - May 2020

- Preprocessed data to get titles and abstracts of the papers, by Python.
- Applied multiple word embedding methods(**Doc2vec**, **BERT**) to get word vectors to find top related titles of papers to query, by **Python**.
- Implemented different searching methods(BM25, GoogleUSE, SciBERT) to find related content in selected papers, by Python.
- Built a QA system based on BERT and BART that can answer key scientific questions regarding COVID – 19.

### Collaborative Online Text and Graphic Whiteboard System

Dalian, China

-Lead Developer

Jan. 2019 - Apr. 2019

- Realized multiple ways(graffiti & chat) for users to collaborate, by C++.
- Implemented history loads and client-server part, by C++.

# **SKILLS**

Computer Languages: Java, Python, C/C++, JavaScript(TypeScript), Bash, SQL, HTML/CSS, Kotlin, IATEX Technologies: Spoken Language and Audio Processing, Data Mining Algorithms, Machine Learning, Parallel Algorithms, Android Development, React Native, Web Development, Cuda Programming, AWS, Mockito, Guice, DynamoDB