HAOLIANG CHEN

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EDUCATION

Northeastern University, Seattle, WA

September 2019 - Present

College of Computer and Information Science

Expected graduation: May 2021

Candidate for a Master of Science in Computer Science

Related Courses: Programming Design Paradigm, Algorithms

Zhejiang University, Zhejiang, China

September 2015 - July 2019

Bachelor of Engineering in Measurement Control Technology and Instruments, GPA: 3.56/4.0

Related Courses: Program Design and Data Structure, Principle of Database System, Network Tech-

nology, Object-Oriented Programming, Machine Learning, Deep Learning Specialization

TECHNICAL KNOWLEDGE

Programming Languages: C++, Java, Python, C, HTML, CSS, JavaScript, SQL

Platforms and Tools: Linux, AWS, Git, Vim, Jupyter Notebook

Frameworks: PyTorch, spaCy, NLTK

RESEARCH EXPERIENCE

Nai Ding's Lab, College of Biomedical Engineering and Instrument Science, Zhejiang University February 2019 - June 2019

- Designed punctuation prediction algorithms based on two pre-trained language models: OpenAI GPT and BERT
- Achieved F₁ scores of 0.602 (OpenAI GPT) and 0.732 (BERT) on the test set Europarl v7

Laboratory of Translation and Localization Technologies, School of International Studies, Zhejiang University September 2018 - February 2019

- Extracted information and studied the patterns of a Chinese word de with regular expression
- Wrote an essay based on the research
- Wrote a post Processing Corpus with Python

PROJECTS

Intelligent Dictionary

August - September 2018

- Wrote a spelling corrector with a one-million-word corpus and the edit-distance algorithm
- Implemented simple 1-letter and 2-letter auto word completion
- Achieved to recognize handwritten letters and translate into Chinese with Microsoft Azure API and Baidu Translate

Image Processing Tool

October - December 2017

- Implemented some image processing algorithms (grayscale, Gaussian blur, etc.) both from scratch and using MATLAB's Image Processing Toolbox
- Used K-means algorithm learned from Machine Learning to compress images

Hypertension Management System

March - May 2017

- Built GUI with Java Swing
- Designed database using SQL Server 2012