

XINYI ZHENG (CAROL ZHENG)

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Website: <https://carolxzyxy.github.io/>

EDUCATION

University of Michigan, Ann Arbor, MI

Expected May 2020

Bachelor of Science in Engineering in Computer Science Engineering, Minor in Math

3.88 / 4

Coursework: Natural Language Processing(grad, audit), Operating Systems, Machine Learning, Optimization Methods (grad), Numerical Methods, Computer Organization, Data Structure and Algorithms

Shanghai Jiao Tong University, Shanghai

Expected Aug. 2020

Bachelor of Science in Engineering in Electrical and Computer Engineering

3.63 / 4

SKILLS

Computer: C/C++, Java (Mallet, Stanford CoreNLP, ElasticSearch), Python (Tensorflow, NLTK, Flask), Matlab, Html/CSS, MySQL, LaTeX

Languages: Chinese (Native), English (Professional Fluency)

EXPERIENCE

Michigan Database Group, Ann Arbor, MI (NLP, Database)

Apr. 2018 - Present

Research Assistant, Hybrid Question Answering System, advised by Prof. H.V. Jagadish

- Design and implement a novel heuristic algorithm for query graph based multi-constraint semantic parser, and get 95% parsing accuracy on *ComplexQuestions* (Bao et al., 2016)
- Transfer natural language question into sub-queries for Open KB with ElasticSearch, build SPARQL for RDF knowledge graph
- Design syntactic features for joint inference on Entity Linking, Relation Extraction and Information Retrieval, and do representation learning for hybrid question answering (ongoing)

Michigan Institute for Data Science, Ann Arbor, MI (NLP, Computational Social Science)

Mar. 2018 – Present

Research Assistant, Analytics for Learners as People (LEAP), advised by Prof. Rada Mihalcea

- Implemented a twitter crawler and collected text and image data of student volunteers, constructed a stream for social media activities
- Conduct Sentiment analysis on text social media, and mining relationship between students' texts and mental state
- Use LDA topic model and LIWC lexicon to analyze social media data based on different criterions
- Designed an Instagram crawler, and wrapped it up as a command line application

Sinolink Securities, Shanghai (NLP, Database)

Dec. 2016 - Feb. 2017

Software Engineer Intern

- Conducted data-preprocessing with MySQL, including filtering useless data and labeling data
- Contributed to Public Opinion System, using JIEBA to classify text in Chinese, capture keywords, and analyze mood in news texts
- Selected data and review selected data for project manager based on clients' requirement

PROJECTS

School of Information (UMSI), Ann Arbor, MI (NLP, Computational Social Science)

Jun. 2018 – Present

Understanding How Social Relationships Affect Information Diffusion, advised by Prof. David Jurgens

- Clean data on more than 200M social relationships, filter mistakenly annotated data based on keyword extraction and verify with web crawler
- Construct data visualization infrastructure based with Bootstrap Algorithm, Matplotlib and Seaborn
- Train classifiers on social relationships based on topics, reciprocity, time series features, etc (ongoing)

University of Michigan, Ann Arbor, MI (Web, NLP, IR)

Dec. 2017 – Jan. 2018

Chinese news search engine with recommendation system based on JIEBA, Flask

- Extracted URL, analyzed HTML and constructed web crawler based on XML and BeautifulSoup
- Constructed index system with SPIMI-INVERT algorithm, used TFIDF model to select news posts, and built recommendation system based on JIEBA text classification and keyword extraction
- Built a web search engine based on flask, supporting news searching and ranking selection

University of Michigan, Ann Arbor, MI (CV)

Feb. 2018 - Mar. 2018

Culinary Classifier with Deep Convolutional Neural Network

- Designed and implemented a deep convolutional neural network based on ResNet, and trained with cross entropy loss
- Constructed an autoencoder to pre-train culinary classifier
- Tested the CNN on Culinary dataset (more than 10k images) with 8 categories, and get around 60% test accuracy

LEADERSHIP

Michigan China Forum, Ann Arbor, MI

Nov. 2017 – Present

President of Liaison Department

- Apply for Student Activity Funding on Campus to raise money for Michigan China Forum
- Outreach companies that are related to Michigan China Forum in different aspects, and collaborate with them to get funding
- Keep accounts, collect budgets and approve expenses

Xuebacoming, Shanghai

June. 2015 – Oct. 2015

Co-founder

- Designed API on Wechat Platform, including automatic response and matching resources
- Led the Investment Department and got Angel-round investment from *Juntai Partner*

AWARDS AND HONORS

3rd place, Bloomberg Coding Challenge, University of Michigan, MI

Nov. 2017

Dean's List, University of Michigan, MI, Shanghai Jiao Tong University, Shanghai

Every Semester