

ZHU Ren

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EDUCATION

The Chinese University of Hong Kong	<i>2023.9 - 2024.10 (Expected)</i>
Master of Science in Computer Science	GPA: 3.1/4.0
Northeastern University (China)	<i>2019.9 - 2023.6</i>
Bachelor of Engineering in Software Engineering	GPA: 3.68/5.0
Honors: Outstanding Student Leader*2, Excellent Student Scholarship*4	

EXPERIENCE

Gematria Technologies , Software Engineer Intern	<i>2022.1 - 2022.5</i>
<ul style="list-style-type: none">• Optimized entity linker with community discovery algorithm, which improved the accuracy by 30%.• Developed distributed crawlers to get finance-related articles with Python Scrapy.• Configured and deployed language models on Scaleway's Linux server.• Proposed to use GloVe algorithm enhanced with KNN to select keywords-related articles.• Built predictive indicators based on time series of cryptocurrency price and sentiment analysis.	

PROJECTS

Fake News Detection Algorithm Based on External Knowledge , Graduate Project	<i>2023.1 - 2023.6</i>
<ul style="list-style-type: none">• Developed an algorithm to verify the authenticity of news by comparing it with external knowledge.• Proposed to construct heterogeneous directed graphs with entities, topics and sentences extracted from news.• Designed an entity comparison network to compute factual differences between news and external knowledge.• Built a graph attention network to capture long-distance dependencies between nodes in the graph.• Achieved approximately 90% accuracy in identifying fake news on the testset.	
Neusoft Online Learning Platform	<i>2023.5 - 2023.7</i>
<ul style="list-style-type: none">• Deigned and implemented an online video learning platform based on the Spring Cloud framework, designed to facilitate the provision of high-quality computer science teaching and management.• Developed multiple microservices to implement core functions and the coordination between them.• Built a back-end management system for platform administrator based on Vue.js and Spring Boot.• Applied adapter pattern, decorator pattern and observer pattern to optimize system architecture.• Used Redis and MyBatis to optimize database operations and improve data access performance.• Used Nacos for microservice management and Nginx for reverse proxy and deployment.	
Research on Interpretable Abstractive Text Summarization	<i>2021.9 - 2021.12</i>
<ul style="list-style-type: none">• Proposed an approach to improve the performance and interpretability of abstractive text summarization.• Built a distiller to extract key information from articles and modeled them into table-structured data.• Implemented a ranking algorithm to select key members from table-structured data.• Fine-tuned T5 with selected key data and defeated SOTA models on Rouge-1 and Rouge-L.	

SKILLS

Programming Languages: Java (Proficient), Python (Proficient), SQL, C++, Go
Frameworks: Spring Cloud, Spring Boot, Vue.js, Node.js, PyTorch, Flask, SQLite, MySQL, Nginx
Development Tools: Git, Docker, VS Code, Bash, IDEA, Jupyter Notebook, PyCharm

ACTIVITIES AND AWARDS

Student Helper (system testing and data analysis), CUHK	<i>2023.9 - Present</i>
National 3rd prize & Provincial 1st prize in National Competition for Software and Information Technology Professionals (Lanqiao Cup) , MIIT	<i>2022.6/2022.5</i>
Meritorious Winner (1st Prize) in Mathematical Contest in Modeling , COMAP	<i>2022.5</i>
Certificate for Applying Machine Learning to Engineering and Science , MIT, Fully sponsored	<i>2021.8</i>