## **Zeqing Qin**

Tel +86 189 7155 6622, Email: zeqing@hust.edu.cn, Date of Birth: 7th June 2000

#### Education

Huazhong University of Science and Technology, Wuhan, China

Sep 2022 – Now

School of Cyber Science and Engineering

MS in Cyberspace Security

Hubei University of Technology, Wuhan, China

Sep 2018 – Jun 2022

School of Computer Science

BS in Software Engineering, GPA: 4.0 / 4.0, Major ranking: 1/142 (0.7%)

Course grades:

Data Structures: 95%, Operating System: 97%, Object-Oriented Programming: 93%, Databases: 95%

Academic focus/background:

Multimodal Biomedical Image Processing, Natural Language Processing(Security)

#### Awards & Honors

Representative of Undergraduate Graduates - Only one person among all graduates

National Scholarship 2020

China Collegiate Computing Contest - First Prize

Mathematical Contest in Modeling(MCM) - Meritorious Winner, Team leader

National Undergraduate Mathematical Contest in Modeling - Second Prize, Team leader

China Undergraduate Computer Design Contest - Third Prize, Tem leader

National Professional Software Engineering "Lan Qiao Cup" Design Contest - Third Prize

# **Research Experience**

Image Registration Method Based on Evolutionary Computation

Aug 2020 – Mar 2022

Supported by the National Natural Science Foundation of China (Grant No.61772180)

Person in charge (Team leader and the only undergraduate student in the group)

- Optimized the process of medical image registration with Evolutionary Computation.
- Improved genetic algorithm by simulating the breeding process of Chinese three-line hybrid rice.
- Achieved faster convergence speed and greater robustness. Published a paper at IEEE SMC2021.

#### Extracting Concept Prerequisite from Network Resources

Jul 2020 – June 2022

Supported by the National Natural Science Foundation of China (Grant No. 61977021)

Assistant Research (Assisted in the design and implementation of experiments)

- Innovatively explored from the two dimensions of Wikipedia and the course introduction.
- Dug out the primary dependencies between learning objects more accurately. Published a paper at SEKE2021.

### **Project Experience**

#### Alibaba Cloud Security WEBSHELL Text Detection

Sep 2022 - Now

Alibaba Group, Wuhan, China

Algorithm Analyst

- Deployed webshell text (malicious code) detection on the Alibaba Cloud platform.
- Based on BERT, we conducted large-scale automated text detection for massive data.
- Modified the algorithm through various methods, resulting in a final detection rate above 97%.
- Working toward a paper.

### Community resource integration application during the COVID-19

Jan 2020 – Jun 2022

Institute of Software Hubei University, Wuhan, China Systems architect

- Aimed at difficulties in community management.
- Provided a platform for community residents to assist each other.

#### **Publications**

[1] **Zeqing Qin**, Zhiwei Ye\*, et al. A Multimodal Biomedical Image Registration Method Based on an Improved Genetic Algorithm Inspired by Hybrid Breeding[C]//2021 International Conference on Systems, Man, and Cybernetics, IEEE SMC2021. (CCF: C, QUALIS: B2)

- material accessible at https://ieeexplore.ieee.org/document/9658798
- [2] Zesong Wang, Kui Xiao\*, Zeqing Qin, et al. Extracting Prerequisites between Concepts from Online Course Introduction[C]//The 33rd International Conference on Software Engineering & Knowledge Engineering, SEKE2021. (acceptance rate: 23.5%, CCF: C, CORE: B, QUALIS: B1)
- material accessible at <a href="https://ksiresearch.org/seke/seke21paper/paper172.pdf">https://ksiresearch.org/seke/seke21paper/paper172.pdf</a>
- [3] Software Copyright Application for "Information Community Mutual Aid App"

#### Extracurricular Activities

Student Union of Hubei University of Technology, Wuhan, China

Oct 2018 – Jun 2022

Student chairperson of the radio station

- Led a working group of six departments to organize day-to-day affairs.
- Undertook tasks including news broadcasting and event commentary.

Chinese Youth League's live broadcast event, Wuhan, China

Jun 2020 – Aug 2020

- Help rural areas sell local specialties online.

Peer Mentor of Hubei University of Technology, Wuhan, China

Jan 2020 - Jun 2022

- Teaching Assistant (TA).

#### Additional Info and Awards

- WARDS First-class Academic Scholarship × 4, 2018-2022
- Language: Mandarin, English(TOEFL:101 R29 L25 S23 W24)