# **WENQIAN CUI**

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### **SUMMARY**

Ph.D. student at The Chinese University of Hong Kong with a strong AI interest. Blend of academic research and hands-on industry engineering, specializing in Natural Language Processing and AI for music with works published. Actively seeking opportunities for research internships in NLP, aiming to leverage my refined skills in an industrial setting to contribute significantly to cutting-edge AI research and projects.

#### **EDUCATION**

## PhD, Computer Science

Graduating January 2028

The Chinese University of Hong Kong

**Highlights:** A first-year PhD student advised by Prof. Irwin King (Chairman, IEEE fellow), focusing on Large Language Models (LLMs), Retrieval Augmented Generation (RAG), and Text-to-Music Generation.

## MSc, Sound and Music Computing

Graduating Octobor 2023

Queen Mary University of London

Distinction

**Highlights:** Deep Learning in Audio and Music, Computational Creativity, Real-Time Audio Programming, Digital Signal Processing. Master's thesis on Al music generation turned into a conference publication.

## BEng, Internet of Things Engineering

Graduating June 2021

Queen Mary University of London & Beijing University of Posts and Telecommunications

First Class

**Highlights:** Data Sturcture, Probability Theory, Signals and Systems, Big Data Technology and Application, **Awards:** Queen Mary University College prize (2021), Excellent Graduation Thesis BUPT (2021), Excellent Graduate BUPT (2021), National Second-Class Scholarship BUPT (2017 & 2018).

## **WORKING EXPERIENCE**

# NLP Research Intern: Tsinghua University, Beijing, China

Sep 2021 - Sep 2022

- Implemented a disease name similarity algorithm using contrastive learning, improving the model's ability to understand the semantics of disease names in real-world scenarios.
- First-authored a paper on ArXiv detailing the effectiveness of the disease similarity algorithm for improving disease normalization tasks.

# Algorithm Engineer Intern: JD.com (Top 2 e-commerce company in China), Beijing, China Apr 2021 – Aug 2021

- Developed an Address Risk Scoring Model using unsupervised version of Char-RNN and Random Forest model whose online call amount exceeds 500k per day.
- Upgraded the backbone of Machine Registration Adversarial Model from a rule-based method to XGboost.

## **PUBLICATIONS**

(EvoMUSART 2024, Best Paper Candidate) **Cui, Wenqian**, Pedro Sarmento, and Mathieu Barthet. "MoodLoopGP: Generating Emotion-Conditioned Loop Tablature Music with Multi-granular Features." In International Conference on Computational Intelligence in Music, Sound, Art and Design (Part of EvoStar), pp. 97-113. Cham: Springer Nature Switzerland, 2024.

(JBI, under review) **Cui**, **Wenqian**, Shaohui Liu, Xiangling Fu, Xien Liu, and Ji Wu. "Exploring semantic information in disease: Simple Data Augmentation Techniques for Chinese Disease Normalization." arXiv preprint arXiv:2306.01931 (2023).

Gu, Mingjun, **Wenqian Cui**, and Xiangling Fu. "BioSentEval: An Evaluation Toolkit for Chinese Medical Sentence Representation." In 2022 IEEE International Conference on Big Data (Big Data), pp. 3107-3111. IEEE, 2022.

Liu, Yijian, Junli Yang, and **Wenqian Cui**. "Simple, Fast, Accurate Object Detection based on Anchor-Free Method for High Resolution Remote Sensing Images." In IGARSS 2020-2020 IEEE International Geoscience and Remote Sensing Symposium, pp. 2443-2446. IEEE, 2020.

#### **TECHNICAL SKILLS**

Programming: Python, Pytorch, Tensorflow, Huggingface, C, C++, Java