

# Yupei Zhang

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Objective: 2024fall Ph.D.

## EDUCATION

<b>City University of Hong Kong (CityU)</b>	GPA: 3.35 / 4.3	Hong Kong, Hong Kong
<i>MSc Multimedia Info Technology (MSMIT1) – Electrical Engineering Department</i>		Sep 2020 – Aug 2021
Related courses: Machine Learning, Digital Image Processing, Computer Graphics, Complex Network, etc.		
<b>Beijing Language and Culture University (BLCU)</b>	GPA: 3.55 / 4.0   86.9 / 100	Beijing, Beijing
<i>Bachelor of Engineering in Digital Media Technology &amp; Japanese Minor</i>		Sep 2015 – Jun 2019
Related courses: C language, C++, Data Structure, Virtual Reality, Video and Audio processing, Signal Processing etc.		
<b>Honors/Awards:</b>		
<ul style="list-style-type: none"> <li>Interdisciplinary Contest in Modeling (2018): Honorable Mention (Administered by COMAP)</li> <li><b>National Encouragement Scholarship (2018)</b>; BLCU University-level Outstanding Student Leader (2018)</li> <li>BLCU Third Prize Scholarship (2017); BLCU Individual Scholarship (2016)</li> </ul>		

## PUBLICATION

### Journal:

- Yupei Zhang\***, Li Pan\*, Qiushi Yang, Tan Li, Zhen Chen. Unified Multi-modal Diagnostic Framework with Multi-level Reconstruction Pre-training and Heterogeneity-combat Tuning. (**JBHI**, under review, \* equal contribution)
- Li, Z., **Zhang, Y.**, Xing, H., & Chan, K. L. (2023). Facial Micro-Expression Recognition Using Double-Stream 3D Convolutional Neural Network with Domain Adaptation. *Sensors*, 23(7), 3577. (Impact Factor: 3.9, **JCR Q1**)
- Zhang, Y. P.**, & Chan, K. L. (2021). Saliency detection with moving camera via background model completion. *Sensors*, 21(24), 8374. (Impact Factor: 3.9, **JCR Q1**)

### Conference:

- Li Pan\*, **Yupei Zhang\***, Qiushi Yang, Tan Li, Zhen Chen. Combat Long-tails in Medical Classification with Relation-aware Consistency and Virtual Features Compensation. (**MICCAI 2023, early accepted, 14%, CCF-B, \* equal contribution**)
- Zhang, Y.** (2022, November). Research on Phoneme Recognition using Attention-based Methods. In Proceedings of the 2022 11th International Conference on Computing and Pattern Recognition (pp. 405-411). (ICCPR 2022 Best oral presentation, EI conference)

## PATENT

- AN INTERACTIVE ELDERLY ASSISTANCE SYSTEM, as one of the inventors 26 July, 2022

## RESEARCH EXPERIENCE

<b>Centre for Intelligent Multidimensional Data Analysis Limited, InnoHK, CityU &amp; Oxford</b>	Hong Kong, Hong Kong
<i>Research Assistant</i>	Oct 2021 – Now
<ul style="list-style-type: none"> <li>Speech to Text and Text to Speech using SAPI library; Voice changer using RVC.</li> <li>Pose Estimation development using Flutter; Motion Capture using Xsens.</li> <li>Full Stack Web Development.</li> </ul>	
<b>Saliency detection with moving camera via background model completion, CityU</b>	Hong Kong, Hong Kong
<i>Dissertation project</i>	Feb 2021 – Aug 2021
<ul style="list-style-type: none"> <li>Background Modeling, Background subtraction, Feedback Mechanism and Evaluation.</li> </ul>	
<b>Analysis of Automatic Landmarks Based on Signal Processing Methods, BLCU</b>	Beijing, Beijing
<i>Final year thesis which won the university's excellent thesis.</i>	Mar 2019 – May 2019
<ul style="list-style-type: none"> <li>Conducted a comparison between signal processing and manually labeling phonemes in TIMIT corpus with Python and Matlab to validate the feasibility of the signal processing method for landmark detecting.</li> </ul>	
<b>Speech Acquisition and Intelligent Technology Lab (SAIT Lab), BLCU</b>	Beijing, Beijing
<i>Corpus research for helping learners effectively master Chinese phonetic skills; App project to help teachers effectively master international students' Chinese skills.</i>	Jul 2018 – Aug 2019
<ul style="list-style-type: none"> <li>Self-taught and completed labeling of a corpus of second language learners with Praat efficiently.</li> <li>Self-taught HTML, CSS &amp; Javascript within a week to optimize user interface of a Chinese learning app.</li> </ul>	

## PROFESSIONAL EXPERIENCE

<b>Zhengzhou Enyu Electronic Technology Co., LTD</b>	Zhengzhou, Henan
<i>Implementation Engineer, research and development Division</i>	Jul 2019 – Nov 2019
<ul style="list-style-type: none"> <li>Maintained the Edelweiss database daily; company income statement for 4 subsidiaries monthly using SQL;</li> </ul>	
<b>JD.Com, Inc.</b>	Beijing, Beijing
<i>Intern, Technology Research &amp; Development Product Manager, Y Division</i>	Jan 2018 – Mar 2018