Yupei Zhang

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EDUCATION

City University of Hong Kong (CityU)   GPA: 3.35 / 4.3   Hong Kong, Hong Kong
MSc Multimedia Info Technology (MSMIT1) – Electrical Engineering Department   Sep 2020 – Aug 2021
Related courses: Machine Learning, Digital Image Processing, Computer Graphics, Complex Network, etc.

Beijing Language and Culture University (BLCU)   GPA: 3.55 / 4.0 | 86.9 / 100   Beijing, Beijing
Bachelor of Engineering in Digital Media Technology & Japanese Minor   Sep 2015 – Jun 2019
Related courses: C language, C++, Data Structure, Virtual Reality, Video and Audio processing, Signal Processing etc.

Honors/Awards:
- o   Interdisciplinary Contest in Modeling (2018): Honorable Mention (Administered by COMAP)
- o   **National Encouragement Scholarship (2018)**; BLCU University-level Outstanding Student Leader (2018)
- o   BLCU Third Prize Scholarship (2017); BLCU Individual Scholarship (2016)

PUBLICATION

Journal:
1. **Yupei Zhang***, Li Pan*, Qiushi Yang, Tan Li, Zhen Chen. Unified Medical Multi-modal Diagnostic Framework with Multi-level Reconstruction Pre-training and Heterogeneity-combat Downstream Tuning. (**MedIA**, under review, * equal contribution)
2. 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**)
3. **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:
1. 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)
2. **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
1. AN INTERACTIVE ELDERLY ASSISTANCE SYSTEM, as one of the inventors   26 July, 2022

RESEARCH EXPERIENCE

Centre for Intelligent Multidimensional Data Analysis Limited, InnoHK, CityU & Oxford   Hong Kong, Hong Kong
Research Assistant   Oct 2021 – Now
- Speech to Text and Text to Speech using SAPI library; Voice changer using RVC.
- Pose Estimation development using Flutter; Motion Capture using Xsens.
- Full Stack Web Development.

Saliency detection with moving camera via background model completion, CityU   Hong Kong, Hong Kong
Dissertation project   Feb 2021 – Aug 2021
- Background Modeling, Background subtraction, Feedback Mechanism and Evaluation.

Analysis of Automatic Landmarks Based on Signal Processing Methods, BLCU   Beijing, Beijing
*Final year thesis which won **the university's excellent thesis**.*   Mar 2019 – May 2019
- 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.

Speech Acquisition and Intelligent Technology Lab (SAIT Lab), BLCU   Beijing, Beijing
Corpus research for helping learners effectively master Chinese phonetic skills; App project to help teachers effectively master international students' Chinese skills.   Jul 2018 – Aug 2019
- Self-taught and completed labeling of a corpus of second language learners with Praat efficiently.
- Self-taught HTML, CSS & Javascript within a week to optimize user interface of a Chinese learning app.

PROFESSIONAL EXPERIENCE

Zhengzhou Enyu Electronic Technology Co., LTD   Zhengzhou, Henan
Implementation Engineer, research and development Division   Jul 2019 – Nov 2019
- Maintained the Edelweiss database daily; company income statement for 4 subsidiaries monthly using SQL;

JD.Com, Inc.   Beijing, Beijing
Intern, *Technology Research & Development Product Manager, Y Division*   Jan 2018 – Mar 2018