JINGJING TANG

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EDUCATION

Artificial Intelligence and Music PhD Program, Queen Mary University of London 09/2020-Current
Ph.D. Student Supervised by: Prof. George Fazekas London, UK

- Research Interests: Style Transfer, Expressive Performance Rendering, Performer Identification, Algorithmic Composition, Computational Creativity, Representations of Music Performance

The Chinese University of Hong Kong, Shenzhen (CUHKSZ) 09/2016-05/2020
Bachelor of Science in Statistics, Major: Data Science Shenzhen, CN

RESEARCH EXPERIENCES

Style-Controllable Expressive Piano Performances Rendering with Deep Generative Models 9/2020-Present
Center for Digital Music, QMUL. **Supervisors: Prof. George Fazekas & Prof. Geraint Wiggins**

- Created and released a large-scale dataset of transcribed expressive piano performances, including more that 11000 performances with composition entity linking applied (link for more details of the dataset)
- Developed pianist identifiers achieving 87% accuracy with 1D-CNNs to evaluate performance style transfer system
- Developed a score-to-performance generation system for expressive piano performances with a Transformer encoder using classical piano performance midis by different pianists
- Working on a generative model that could render expressive performance by changing a performance of one pianist into the style of another based on the score-to-performance system

Speaker Identification with Deep Neural Networks 02/2019-09/2020
Wireless Communication Lab of CUHKSZ **Supervisor: Prof. Man-On Pun**

- Researched on speaker identification task based on CNN models and optimized the performance of the CNN with additional sources created through harmonic-percussive source separation and proposed a novel multi-channel CNN structure that achieved an improvement of 9% in the prediction accuracy compared with single channel CNN models

WORK EXPERIENCES

Gene Detection and Location (Intern Project) 4/2020-9/2020
GeneMind Biosciences Company Limited **Algorithm Engineer**

- Reviewed literature of image segmentation and objective detection with the application of deep learning algorithms, proposed possible solutions to detect centers of spots in photos taken by microphotography, and developed frameworks using Residual Fully CNNs for the gene detection task to assist base call process by training models with PyTorch

PUBLICATIONS

- **Jingjing Tang**, Geraint A. Wiggins, George Fazekas, "Reconstructing Human Expressiveness in Piano Performances with a Transformer Network", The 16th International Symposium on Computer Music Multidisciplinary Research, 2023
- Eleanor Row, **Jingjing Tang**, George Fazekas, "JAZZVAR: A Dataset of Variations found within Solo Piano Performances of Jazz Standards for Music Overpainting", The 16th International Symposium on Computer Music Multidisciplinary Research, 2023
- **Jingjing Tang**, Geraint A. Wiggins, George Fazekas, "Pianist Identification Using Convolutional Neural Networks", The 4th International Symposium on the Internet of Sounds, 2023
- Huan Zhang*, **Jingjing Tang***, Syed Rm Rafee*, Simon Dixon, George Fazekas, Geraint A. Wiggins, "ATEPP: A Dataset of Automatically Transcribed Expressive Piano Performance", International Society for Music Information Retrieval Conference, 2022 (*Co-Primary Author)
- Yuejiao Xie, **Jingjing Tang**, Nan Yang and Man-On Pun, "Large-Scale Multi-Channel Transformer-based Speaker Identification with Knowledge Transfer Using Harmonic-Percussive Source Separation," 2022 31st Wireless and Optical Communications Conference (WOCC), 2022
- Yu Zhang, Fang Fang, **Jingjing Tang,** et al. "Association Between Vitamin D Supplementation and Mortality: Systematic Review and Meta-Analysis". BMJ 2019; 366:l4673
- Fang Fang, Yu Zhang, **Jingjing Tang**, et al. "Association of corticosteroid treatment with outcomes in adult patients with sepsis: a systematic review and meta-analysis." JAMA internal medicine 179, no. 2 (2019): 213-223.

PROGRAMMING & SOFTWARE SKILLS

Python, PyTorch, Keras, Tensorflow, Numpy, Scipy, Pandas, R