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EDUCATION

NANJING UNIVERSITY (NJU) Nanjing, China
School of Electronic Science and Engineering, Bachelor of Engineering 2015 - 2019

- Major: Communication Engineering;
- Awards: Second-Class People's Scholarship; Special-Class People's Scholarship; Yang Yongman Scholarship

EXPERIENCE

VISION LABORATORY|NANJING UNIVERSITY Nanjing, China
Researcher Fall 2016-Present

- Used optical flow compensation in multi-frames super-resolution
- Estimated the optical flow in two or more neighboring frames to fulfill Video Frames Interpolation
- Adopted generative adversarial networks for extreme image compression, proposed a novel Multi-Scale AutoEncoder framework, reconstructed the images with acceptable perceptual quality at a low bitrate (like 0.03bpp). The paper "EXTREME IMAGE COMPRESSION VIA MULTISCALE AUTOENCODERS WITH GENERATIVE ADVERSARIAL OPTIMIZATION" was submitted to ***ICIP 2019***.

CAMPUTER LABORATORY|DUKE KUNSHAN UNIVERSITY Suzhou, China
Assistant R & D Engineer Summer 2018

- Selected the Compressed-Sensing method to reduce computation in the encoder, designed an integer kernel strategy for training, processed the raw bayer format data from camera, and the outcome performed better than JPEG/JPEG2000 (maintaining high quantitative profile ~35dB in PSNR with compression ratio around 1/200)
- Combined traditional compressed methods (Frames Interpolation & Motion Estimation) with our conv2D method to achieve high compression ratio in total while maintaining good image quality of the compressed images, with high quantitative profile: our method can both run alone and combined with existing state-of-art algorithms.
- Reduced the power consumption largely about 10-100 times and our strategy is Energy-efficient
- The work was applied for a U.S patent and the related paper "Compressive Sampling for Array Cameras" was submitted to ***Nature Communications***.

YANSHENG TECHNOLOGY CO., LTD. Guangzhou, China
Assistant Researcher Summer 2017

- Improved the storage algorithm and program structure, provided a powerful data analysis function in order to improve Fujian traffic system's efficiency
- Participated in web page design and helped establish a user friendly interface with quick response and concise style operation

ADDITIONAL INFORMATION

- Computer Skills: C, C++, Python, Tensorflow, Pytorch
- Languages: Fluent in Mandarin, Cantonese, Russian and English
- Leadership: Chairman of Xianyu Sign Language Community, Nanjing University (08/2016 - 06/2017); Chairman of Academic Department, School of Electronic Science and Engineering (08/2016 – 06/2017)
- Interests: Sign Language, Travelling, Movie, Basketball