Fan Wang

CONTACT Department of Computer Science mobile: (631) 559-0857

INFORMATION Stony Brook University, Stony Brook, NY, 11794 E-mail: fan.gordon.wang@gmail.com

EDUCATION Stony Brook University, Stony Brook, NY Sep. 2016 – Present

Ph.D. Candidate, Computer Science

GPA: 3.86 / 4.0

Advisor: Prof. Chao Chen

National University of Singapore, Singapore

Sep. 2012 - Jul. 2013

M.S. Electrical Engineering

• CAP: 4.3 / 5.0 (GPA: 3.52 / 4.0)

• Advisor: Prof. Ying Sun Examiner: Prof. Shih-Cheng Yen

Master Thesis: Resource-Efficient Adaptation Techniques for Brain-Computer Interfaces

Lanzhou University, Lanzhou, Gansu, China

Sep. 2008 - Jun. 2012

B.S. Computer Science

GPA: 3.89 / 4.0 (Rank: 2 / 77)

• Advisor: Prof. Wei Su

• Undergraduate Thesis: Information Accessibility Oriented Mathematical Formulas Conversion

WORK VI DIMENSIONS PTE LTD, Singapore

Jan. 2016 - Aug. 2016

EXPERIENCE

CUDA-ACCELERATION OF VIDEO SURVEILLANCE SYSTEM

Design and implement a CUDA accelerated GMM background subtraction system for video surveillance.

Singapore University of Technology and Design, Singapore

Oct. 2015 - Jan. 2016

Neighbor-Proximity Concerned Disambiguation Framework

Propose a neighborhood proximity concerned minimum spanning tree method for repetitive structures disambiguation in structure from motion.

ADSC Illinois at Singapore Pte. Ltd, Singapore

Sep. 2013 – Sep. 2015

WIDE-BASELINE FEATURE MATCHING SYSTEM

Develop a feature matching system which reliably generates large numbers of good quality correspondences over wide baselines where previous techniques provide few or no matches.

CUDA AFFINE SIFT

Build an affine-SIFT module from Changchang Wu's SiftGPU with affine simulations performed inside device memory. CUDA affine-SIFT achieves up to 30 times speedup.

MAGIC TOUCH

Develop software to animate still images with fun and eye-catching visual effects. The project was covered by *the Strait Times* (Singapore based newspaper) in April 2014.

HONOURS AND National Scholarship of China, Dec 2009

AWARDS First Class Scholarship of Lanzhou University, Dec 2010

First Class Scholarship of Lanzhou University, Dec 2011

- PUBLICATIONS 1. Fan Wang, Huidong Liu, Dimitris Samaras, Chao Chen, "TopoGAN: A Topology-Aware Generative Adversarial Network." European Conference on Computer Vision (ECCV), 2020, (Oral, acceptance rate 2.1%).
 - 2. Fan Wang, Aditi Nayak, Yogesh Agrawal, Roy Shilkrot, "Hierarchical Image Link Selection Scheme for Duplicate Structure Disambiguation." British Machine Vision Conference (BMVC), 2018.
 - 3. Wen-Yan Lin, Fan Wang, Min-Ming Cheng, Sai-Kit Yeung, Philip H.S. Torr, Minh N. Do, Jiangbo Lu, "CODE: Coherence Based Decision Boundaries for Feature Correspondence." Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2017.

SKILLS

C, C++, Java, CUDA C, Matlab, QML, OpenCV, Eigen, Python.