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EDUCATION

UNIVERSITY OF SOUTHERN CALIFORNIA, USA

Master Student, Aug. 2019-Now

- Major: Computer Science
- GPA: 3.66/4.0
- Core Courses: Algorithm Analysis, Computer Graphics and rendering, Computer Networks, Database Systems

UNIVERSITY OF CALIFORNIA, BERKELEY, USA

Exchange Summer Student, July 2018-Aug. 2018

- GPA: 3.72/4.0

DALIAN MARITIME UNIVERSITY (DLMU), China

Bachelor of Engineering, Sept. 2015-June 2019

- Major: Electronic Information Science and Technology
- GPA: 3.4/4.0 Major GPA: 3.6/4.0
- Core Courses: High-frequency Electronic Circuit, Low-frequency Electric Circuit, Antennas and Microwave, Principles of Communication, Signal Processing, Digital Signal Processing

RESEARCH EXPERIENCES

USC Institute for Creative Technologies, Vision and Graphics Lab, Los Angeles, CA

Research Assistant, July. 2019-Now, Supervised by [Prof.Hao Li](#) & [Dr.Mingming He](#)

- Work with AI Driven face synthesis
- Work with the Correspondence Proposal autoencoders for sparsely labeled semantic pointnet segmentations

USC Institute for Creative Technologies, Vision and Graphics Lab, Los Angeles, CA

Visiting Student, Mar. 2019-June 2019, Supervised by [Prof.Hao Li](#) & [Dr.Mingming He](#)

- Assisted in the 3D reconstruction of face by applying deep learning knowledge
- Work with the laboratory staff on realistic image synthesis (face swapping) and segmentation based on deep learning

Speech Aids Equipment Specialized for Disabled People Based on Body Structure ([DEMO](#) in Chinese)

Designer, Feb.2017-Sept. 2018

Project Results and Content: Successfully reached the goal of helping dyslexics by making sounds according to their sign language. This project was evaluated to own a very bright future.

- Gained the 2nd Price of Innovation and Entrepreneurship Challenge Cup awarded by Liaoning Province Education Bureau and got the provincial-level training honor

Chinese Academy of Sciences (CAS), Beijing, China

Research Assistant, Aug.2017-Sept. 2017

- Cooperated with other team members and completed three research tasks assigned by the superior
- Built the MPDBUS RTU & TCP protocol frame of industrial control protocol network

- ♦ Took the initiative to complete the adaptive debug and experimental measures for an intelligent home control system

PUBLICATIONS & PROJECTS

Distilling Unknown Factor for Disentanglement (CVPR 2021 Submission)

Sitao Xiang, Yuming Gu, Pengda Xiang, Yajie Zhao, Hao Li and Mingming He

Digital Hulk Face Replacement

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Light-Stage Head Back Reconstruction ([Project Page](#))

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One-Shot Identity-Preserving Portrait Reenactment (Arixv) ([PDF](#), [DEMO](#))

Sitao Xiang, Yuming Gu, Pengda Xiang, Mingming He, Koki Nagano, Haiwei Chen and Hao Li

Protecting World Leaders Against Deep Fakes (CVPR 2019 Workshop) ([PDF](#))

Shruti Agarwal, Hany Farid, Yuming Gu, Mingming He, Koki Nagano, and Hao Li

Modeling and Optimization for Sky Wave Propagation Loss Model Based on Enumerative Algorithm (2018 CSPS) ([PDF](#))

Yuming Gu, Zhenyu Na, Xiao Liu, Huahan Zhang, Wei Wang

NEWS

[US Congress Hearing](#): US Congress holds hearing on "deepfakes" and artificial intelligence - watch live

[USC News](#): "Deep Fakes": Researchers Develop Forensic Techniques to Identify Tampered Videos

[MIT Technology Review](#): A new deepfake detection tool should keep world leaders safe—for now

[CNET](#): Deepfake debunking tool may protect presidential candidates. For now. Sometimes

[CNN](#): Why it's getting harder to spot a deepfake video

EXTRACURRICULAR ACTIVITIES

Davos World Economy Forum, Annual Meeting of New Champions (AMNC)

Expert of Operation Team, Dalian Organization Committee June 2019-July 2019

- ♦ Organized the training for student volunteers and successfully lead the student operation team
- ♦ Introduced the face swapping technology to participants and medias

Davos World Economy Forum, Annual Meeting of New Champions (AMNC)

Assistant of Operation Team, June 2017- July 2017

- ♦ Worked hard with a strong sense of responsibility
- ♦ Assisted president of Corporation Communication Department Ms. Joy Tan to serve for foreign guests on Huawei thematic evening party

ADDITIONAL INFORMATION

Honors & Awards:

- 2nd Prize in MCM/ICM American Mathematical Modeling Competition
- 2nd Prize of University Students' Challenge Cup, awarded by Liaoning Province Education Bureau

- Outstanding Volunteer of Davos World Economic Forum
- 2nd Prize of Scholarship for Academic Excellence, awarded by Dalian Maritime University
- 1st Prize of Emotional Quotient, awarded by Dalian Maritime University
- ♦ **Computer skills:** Python(Tensorflow, Keras, PyTorch), Matlab, Java, C++
- ♦ **Languages & Standard Test:** TOEFL: 100; GRE : 319;