REN LI

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https://liren2515.github.io/page/

EDUCATION

École polytechnique fédérale de Lausanne (EPFL) *September 2021 - Present*
PhD student in Computer Science
EDIC Computer and Communication Sciences

Purdue University *August 2016 - May 2019*
MS in Electrical and Computer Engineering Overall GPA: 3.94/4.0
Department of Electrical and Computer Engineering

University of Science and Technology of China (USTC) *August 2012 - June 2016*
Bachelor of Electrical Engineering Overall GPA: 4.00/4.3
Department of Electrical Engineering and Information Science **Rank: 1/106**

TECHNICAL STRENGTHS

Computer Languages	Python, C/C++
Software & Tools	PyTorch, TensorFlow, MATLAB

WORKING EXPERIENCE

United Imaging Intelligence, Boston, MA September 2019 - March 2021
Research Intern

· ***Human Mesh Recovery***: Recovering human pose and shape from RGB-D or RGB input under daily or medical environment. Targeting at a contactless patient positioning system that can enable scanning patients in a completely remote and contactless fashion.

SenseTime, Beijing May 2019 - February 2020
Research Intern/Part-time Researcher

· ***Face Forgery***: Building a large-scale dataset for face forgery. Implementing a GAN-based model to generate face swapping videos, and conducting a comprehensive study that evaluates representative detection baselines under different noise settings.

Purdue University, West Lafayette, IN September 2016 - May 2019
Research Assistant

· ***EEG-Based Visual Classification***: Building a large dataset for the task of EEG-based visual classification, analyzing EEG signals by various models to do the image/video classification for the understanding of human perception, and visualizing the spatial, temporal and spatio-temporal activation maps of the human brain by novel methods. Also refuting some erroneous works which achieved high accuracy via wrong experimental settings.

· ***Visual Relationship Detection Based Video Retrieval***: Building a CNN model to reason the visual relationship between two objects within a video frame, and assembling the frame-level visual relationship to obtain the video-level tags for each tracked object tube, which can be used for video retrieval.

· ***Deep Intermodal Video Analytics (DIVA-IARPA)***: Implementing the evaluation metrics, and assisting NIST to correct the ill-defined metrics in the released documents and fix the bugs existing in the official scorer software.

Gottfried Wilhelm Leibniz Universitt Hannover, Germany   January 2016 - May 2016

Research Assistant

· ***Contact-Free Camera Measurements of Heart Rate***: Extracting the color traces of RGB channels within the tracked face region in the video and deriving the heart rate from the color traces by filtering and frequency analysis. Achieving more robust and accurate performance on heart-rate estimation than other state-of-the-art benchmarks.

USTC   June 2014 - May 2016

Research Assistant

· ***Synthesis Distortion Estimation in 3D Video***: Analyzing the virtual view synthesis distortion induced by depth error for 3D video coding, and refining the distortion estimation model based on statistical information.

PUBLICATIONS

Ren Li, Meng Zheng, Srikrishna Karanam, Terrence Chen, Ziyan Wu, *"Everybody Is Unique: Towards Unbiased Human Mesh Recovery"*, BMVC (Oral), 2021.

Runze Li, Srikrishna Karanam, **Ren Li**, Terrence Chen, Bir Bhanu, Ziyan Wu, *"Learning Local Recurrent Models for Human Mesh Recovery"*, 3DV, 2021.

Ren Li*, Srikrishna Karanam*, Fan Yang*, Wei Hu, Terrence Chen, Ziyan Wu, *"Towards Contactless Patient Positioning"*, Transactions on Medical Imaging (TMI), 2020.

Ren Li, Jared S. Johansen, Hamad Ahmed, Thomas V. Ilyevsky, Ronnie B Wilbur, Hari M Bharadwaj, Jeffrey Mark Siskind, *"The Perils and Pitfalls of Block Design for EEG Classification Experiments"*, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2020.

Georgios Georgakis*, **Ren Li***, Srikrishna Karanam, Terrence Chen, Jana Kosecka, Ziyan Wu, *"Hierarchical Kinematic Human Mesh Recovery"*, ECCV, 2020.

Fan Yang*, **Ren Li***, Srikrishna Karanam, Terrence Chen, Haibin Ling, Ziyan Wu, *"Robust Multimodal 3D Patient Body Modeling"*, International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), 2020.

Liming Jiang, **Ren Li**, Wayne Wu, Chen Qian, Chen Change Loy, *"DeeperForensics-1.0: A Large-Scale Dataset for Real-World Face Forgery Detection"*, CVPR, 2020.

Yijian Xiang, Lu Fang, **Ren Li**, N. M. Cheung, *"Depth Error Induced Virtual View Synthesis Distortion Estimation for 3D Video Coding"*, IEEE Data Compression Conference (DCC), 2015.

* equal contribution.

AWARDS & HONORS

Guo Moruo Scholarship*, USTC, 2015

National Scholarship (Top 2%), MOE of China, 2014

The Talent Program Scholarship (Top 3%), USTC, 2014

*Guo Moruo Scholarship is the first scholarship of P.R. China, and the most highly regarded honor by USTC students and alumni, in name of our first president Mr. Guo Moruo.