

# ZHOUYINGCHENG LIAO(廖周应成)

## CONTACT INFORMATION

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## RESEARCH INTERESTS

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My research interests are in the area of computer vision, deep learning. I did research on object detection and face recognition before. Currently, I am working on human skin mesh reconstruction which could be combined with pose estimation.

## EDUCATION

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**Shanghai Jiao Tong University** Sep, 2015 - Present  
*Undergraduate Student*

- Major: Information security
- School of Electronic Information and Electrical Engineering

## RESEARCH EXPERIENCE

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**Shanghai Jiao Tong University** Apr, 2017 - June, 2018  
*Undergraduate Researcher*

- Advisor: Prof. [Bingbing Ni](#)
- Face recognition, face detection
- Object detection
- Self-supervised learning

**SenseTime** July, 2018 - Present  
*Research Intern*

- Pose estimation
- Human skin mesh reconstruction

## PUBLICATIONS

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**Uniface: A Unified Network for Face Detection and Recognition** [\[paper\]](#)[\[poster\]](#)  
*Accepted by the 24th International Conference on Pattern Recognition. ICPR 2018*

- **Zhouyingcheng Liao**, Peng Zhou, Tailong Wu and Bingbing Ni

- A bottom-up/top-down structure is adopted to combine face detection and recognition
- An attention mechanism is adopted to replace face alignment
- A single-network model, i.e. Uniface network is proposed which achieves the accuracy of 99.0% on LFW

### **Live Face Verification with Multiple Instantialized Local Homographic Parameterization**

*Accepted by the 27th International Joint Conference on Artificial Intelligence. **IJCAI 2018***

- Chen Lin, **Zhouyingcheng Liao**, Peng Zhou, Jianguo Hu and Bingbing Ni
- A model which could classify live facial sequence and recorded facial sequence is proposed
- Due to local homography property of recorded facial sequence, a transformation network is embedded in the model
- Each image is divided into several patches and multiple instance learning is applied

## **UNDER-REVIEW PAPERS**

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### **Learning to Fuse - A Noise Prediction Framework for Denoising Monte Carlo Rendering Images**

*Submitted to Pacific Graphics 2018*

- **Zhouyingcheng Liao\***, Yiheng Zhang\* and Lizhuang Ma (\* denotes equal contribution)
- A smoothing network that predicts pixel-wise denoising kernels
- A sharpening network that directly predicts each denoised pixel
- A mask network that learns to fuse above two outputs to form the final output

## **AWARDS**

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### **MCM/ICM 2017 Problem E Meritorious Winner**

Feb, 2017

- Zhouyingcheng Liao, Ziping Liu and Qiucheng Wu, Advisor: Fan Wu

### **31<sup>st</sup> Chinese Physics Olympiad (Jiangxi Province) First Prize**

Sep, 2014

- Rank: 21<sup>st</sup>

## **SKILLS**

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<b>Programming</b>	Python
<b>Language</b>	C/C++
	Verilog
	Javascript
<b>Framework</b>	MxNet
	TensorFlow
	PyTorch