WEN JIANG

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EDUCATION

B.E. College of Computer Science, Zhejiang University(ZJU) 09/2016 - 06/2020

- Major: *Software Engineering;*
- Minor in an honor class at Chu Konchen Honors College, Zhejiang University;
- Member of He Zhijun Class, honor class for College of Computer Science, Zhejiang University;
- Cumulative GPA: 3.86/4.00; Last year GPA: 3.96/4.00; Ranked 7/75;

PUBLICATIONS

Coherent Reconstruction of Multiple Humans from a Single Image
Wen Jiang, Nikos Kolotouros*, Georgios Pavlakos, Xiaowei Zhou, Kostas Daniilidis* *CVPR 2020*

- In this work, we address the problem of multi-person 3D pose estimation from a single image.

Deep Snake for Real-Time Instance Segmentation
*Sida Peng, **Wen Jiang**, Huaijin Pi, Xiuli Li, Hujun Bao, Xiaowei Zhou* *CVPR 2020(oral)*

- This paper introduces a novel contour-based approach named deep snake for real-time instance segmentation.

Fast and Robust Multi-Person 3D Pose Estimation from Multiple Views
*Junting Dong, **Wen Jiang**, Qixing Huang, Hujun Bao, Xiaowei Zhou* *CVPR 2019*

- This paper addresses the problem of 3D pose estimation for multiple people in a few calibrated camera views.

ACADEMIC EXPERIENCE

Research Intern on 3D Vision July 2019 - October 2019
Advisor Prof. Kostas Daniilidis *GRASP Lab, University of Pennsylvania*

- Worked on a project for multi-person pose and shape estimation.
- Our complete framework achieves very competitive performance, outperforming previous approaches in the traditional 3D pose. (error: 150.3mm vs. 143.2mm etc.)metrics, while our proposed losses enable more coherent results, qualitatively and quantitatively, in natural images.
- Tackled the issue of closely interacting people by introducing the SDF loss to tackle the issue of persons closely interacting with each other.
- Employed differentiable renderer to leverage in the wild datasets and enforce the correctness on depth ordering.
- The paper for this project was submitted to CVPR2020.

Research Intern on 3D Vision April 2018 - now
Advisor Prof. Xiaowei Zhou *State Key Lab of CAD&CG, Zhejiang University*

- Worked on several projects of object reconstruction, human pose estimation and instance segmentation.
- Studied on instance segmentation with a novel method by learning a representation called "snake". This is a generic and class-agnostic method could be applied to most detection architecture. Both the accuracy and speed have been improved compared with existing methods. This work was submitted to CVPR2020.

· Studied on generic pose estimation for 3D objects. This project tries to solve 3D object pose for agnostic categories based on intrinsic properties of objects such as symmetry clue. Experiments have shown convincing result on pose estimation for symmetry objects. More details will be presented upon the finish of this project.
· Implemented a new state-of-the-art pipeline of 3D pose estimation for multiple people in a few calibrated camera views. The proposed approach achieves significant performance gains from the state-of-the-art (96.3% vs. 90.6% and 96.9% vs. 88% on the Campus and Shelf datasets, respectively) The paper for this project has been accepted by CVPR 2019.
· Investigated different methods for human pose estimation including end-to-end, 2D to 3D, and weakly supervision, etc; analyzed the advantages and disadvantages of the aforementioned methods.

HONORS

- He Zhijun Scholarship (Highest scholarship at College of Computer Science, 10 students selected from all undergraduate/graduate students every year) 2019
- Third-class Scholarship for Outstanding Students (top 15%) 2019
- Provincial Government Scholarship, Zhejiang Provincial Government (top 10%) 2018
- Outstanding Student Scholarship, Zhejiang University (top 10%) 2018
- Second Prize of the National Talents Training Base, Zhejiang University (top 10%) 2018
- Second-class Scholarship for Outstanding Students (top 10%) 2018
- Outstanding Student Scholarship, Zhejiang University (top 15%) 2017
- Third-class Scholarship for Outstanding Students (top 15%) 2017

TECHNICAL STRENGTHS

Computer Languages	Python, MATLAB, C/C++, Java
Software & Frameworks	PyTorch, Numpy, OpenCV, Scipy, Pandas, Cython
Language	English (Fluent, TOEFL 103), Chinese(Native Speaker)

OTHER PROJECTS

Mathematical Modeling on Social Mobility

· Study on social mobility with stochatic matrix.
· This study was done during a Datathon(Hackson style competition on data science) hosted by 51job and Correlation One.
· Our four people team was awarded with sliver medal and CNY 40k prize money in this Datathon.

Robot self-locating system

· Encapsulate "AprilTags Visual Fiducial System" C++ library to a python library.
· This repository is dedicated to work as self-locating system on a NI StarterKit robot.
· Code is available on https://github.com/JiangWenPL/locating

mini-SQL

· A mini relational database written in C++.
· Code is available on https://github.com/JiangWenPL/miniSQL