

# Xuan Ju

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## EDUCATION

### The Chinese University of Hong Kong

Hong Kong, China

Ph.D. in Computer Science and Engineering

Aug 2022 - Aug 2026

- Ph.D. candidate at [CURE Lab](#), supervised by Prof. Qiang XU.

### Tongji University

Shanghai, China

B.S. in Computer Science ( Minor Degree in Mathematics and Applied Mathematics )

Sep 2018 - Jul 2022

- GPA: **4.85/5.0**, Ranking: **Top 1%** (including non-experimental-area students)
- Studied in **Mathematical Intensive Training Class** (Innovation Experimental Area)

## HONORS & AWARDS

- *Scholarship*: **National Scholarships**, 2/156 (Oct 2021)
- *Scholarship*: **National Scholarships**, 1/156 (Dec 2020)
- *Scholarship*: **QiDi Scholarship**, 1/156 (May 2022)
- *Competition*: **First Prize** in "Challenge Cup" National College Students Contest of Extracurricular Academic and Scientific Work (March 2022)
- *Honor*: **Shanghai outstanding graduates** (April 2022)
- *Competition*: **Gold award** in "Challenge Cup" Shanghai College Students Entrepreneurship Plan Competition (Jun 2022)
- *Competition*: **First Prize** in "Challenge Cup" Shanghai College Students Contest of Extracurricular Academic and Scientific Work (May 2021)
- *Competition*: **First Prize** in National College Student Computer Design Competition (July 2022)
- *Honor*: Outstanding Student of Tongji University (Jan 2021)
- *Scholarship*: Guo Xie Birong Scholarship (Dec 2019)
- *Competition*: Honorable Mention in Mathematical Contest In Modeling (Apr 2021)

## PROJECT & INTERNSHIP

### Internship in CURE Lab

Dec 2021 - Jul 2022

Work in CURE Lab under the supervision of Qiang Xu

- *Research*: We propose a simple baseline framework for videobased 2D/3D human pose estimation that can achieve 10x efficiency improvement over existing works without any performance degradation, named **DeciWatch**.
- *Research*: We propose a novel plug-and-play refinement network, namely **SmoothNet**, which can be attached to any existing pose estimators to improve its temporal smoothness and enhance its per-frame precision simultaneously.

### Internship in SenseTime

Dec 2021 - May 2022

Research Institute

- *Open Source Code Base Construction*: Participate in the construction of MMHuman3D
- *Research*: Work on the topic of efficient and smooth human pose estimation

### Internship in IDEA (粤港澳大湾区数字经济研究院)

Jun 2022 - Jul 2022

Research Institute

- *Research*: Work on the topic of 3D pose estimation

### Fault Detection of High-speed Railway Pantograph Based on Digital Image Analysis

Apr 2019 - Nov 2020

Project Leader

- *Honor*: Successfully concluded as a **National College Student Innovation and Entrepreneurship Training Program** in Jun 2020
- *Honor*: Awarded Tongji University Dream Fund in Nov 2019 (**Top 5 projects**)

## PUBLICATIONS

- Zeng A, **Ju X**, Yang L, et al. DeciWatch: A Simple Baseline for 10x Efficient 2D and 3D Pose Estimation[J]. arXiv preprint arXiv:2203.08713, 2022. [[Paper](#), accepted to **ECCV2022**]
- Zeng A, Yang L, **Ju X**, et al. SmoothNet: A Plug-and-Play Network for Refining Human Poses in Videos[J]. arXiv preprint arXiv:2112.13715, 2021. [[Paper](#), accepted to **ECCV2022**]
- Yang C, **Ju X**, Liu E, et al. Blockchain-based indoor location paging and answering service with truncated-geo-indistinguishability[J]. **IET Blockchain**, 2021. [[Paper](#)]
- Lin Y, Wu M, **Ju X**, et al. Finite Element Simulation Study on Wear under Pantograph-Catenary System with Electric Current[C]//2020 IEEE International Conference on High Voltage Engineering and Application (**ICHVE**). IEEE, 2020: 1-4. [[Paper](#)]

## MISCELLANEOUS

- **Skills**: Python, C/C++, MATLAB, Verilog HDL, HTML, JavaScript, CSS, Git, LaTeX, MySQL
- **Research Interests**: Artificial Intelligence, Computer Vision, Motion Understanding
- **Leadership**: Tongji University Frisbee (TJUF) Spirit Captain, Member of class' leading group, etc.
- **Activities**: Tongji University Student Aid Publicity Ambassador, Operation of [Pandonut](#), etc.