Xuan Ju

+8613273105100 | 1851846@tongji.edu.cn
4800 Caoan Rd., Jiading Dist., Shanghai, China, 201804

EDUCATION

Tongji University Shanghai, China

B.S. in Computer Science Sep 2018 - Jul 2022

- GPA: **4.83/5.0**, Ranking: **Top 1%** (including non-experimental-area students)
- Relevant Coursework: Chinese Information Processing, Pattern Recognition, Data Mining, Data Structures, Operating Systems, Principle of Compilers, Computer Organization, Computer Networks, Software Engineering, etc.

Sep 2018 - Jan 2020

Minor Degree in Mathematics and Applied Mathematics

- Studied in **Mathematical Intensive Training Class** (Innovation Experimental Area)
- Relevant Coursework: Mathematical Analysis, Advanced Algebra, Theory of Probability, Statistics, Discrete Mathematics, Combinatorics, Numerical Analysis, Complex Analysis, Ordinary Differential Equation, etc.

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)
- *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 Sep 2021 - May 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 10× 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

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, submitted 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, submitted 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,
- **Languages:** Mandarin (Native), English
- **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.