YUXUAN ZHOU

"I think therefore I am."

@ zhouyx2@shanaghaitech.edu.cn   ⚲ ShanghaiTech University,Shanghai, China
🌐 https://woodthinks.github.io/   ⚙ Woodthinks

EXPERIENCE

Intern Researcher
RhythMo

📅 March 2022 – Ongoing   ⚲ No.1, Zhongke Road, Shanghai

- https://rhythmo.cn/
- Take part in testing products such as RhyLive and Rhyverse etc.
- Develop MotionBlender, an automation scripts for working with datasets in different formats.
- Take part in research group and publish a conference paper.

ABILITIES

Programming   ●●●●◐

English Writing   ●●●●◐

Algebra   ●●●●○

Unity3D   ●●●○○

PUBLICATIONS

📄 Conference Articles

- W. Zhang, M. Huang, Y. Zhou, *et al.*, "Both2hands: Inferring 3d hands from both text prompts and body dynamics," *arXiv preprint arXiv:2312.07937*, 2023.

PROJECTS(MAIN)

Algorithmic Information Theory: Kolmogorov Complexity and its application
Course Project of the Elements of Information Theory

- Study Kolmogorov Complexity
- Design a distance metric to measure the similarity
- Experiment metrics and analyze their performance.

An AI player in PVZ
Course Project of the Artificial Intelligence

- Use C++ with OpenGL to finish a PVZ simulator.
- Build an AI agent with reinforcement learning.
- Design features for better extraction.

MOST PROUD OF

🏆 **Teaching Assistants**
For basic courses (Introduction to Programming & Algorithms and Data Structures), design programming assignments and PDF homework. Also teach recitations for them.

💓 **Publication on CVPR**
Finish a paper from scratch in 4 months with others.

💓 **A puzzle book**
Integrated with puzzles(most on Mathematics) and their solutions writing on my own.

LANGUAGES

Chinese   ●●●●●

English   ●●●●◐

Janpanese   ●●○○○

WELL-LEARNED COURSES

🏆 **Discrete Maths (A+)**
Undergraduate Course

🏆 **Algorithms and Data Structures (A+)**
Undergraduate Course

🏆 **Algorithm Design and Analysis (A+)**
Graduate Course

🏆 **Algorithmic Game Theory (A)**
Graduate Course

EDUCATION

Undergraduate
ShanghaiTech University

📅 Sept 2021 – Ongoing   ⚲ Shanghai, Shanghai

Senior high school student
Suzhou High School of Jiangsu Province

📅 Sept 2018 – June 2021

Junior high school student
Weichang Experimental Program in Suzhou High School

Denoising Diffusion Probabilistic Models
Paper Reading in research groups

- Read the paper "Denoising Diffusion Probabilistic Models" and analyse the core idea.
- Present its principles from the beginning to the end and discuss how to put it into practice.

ETC: Exploit gaussian Template model on animatable avatar by Conditioning
Course Project of the Computer Vision I

- Design a pipeline inspired by previous works for the task.
- Propose new loss terms and regulation methods to optimize the results and work well.
- Take a complete presentation of the results, including posters, experiments, reports, etc.

PERSONAL STATEMENT

I am Yuxuan Zhou, an undergraduate in ShanghaiTech University.

Currently I am a undergraduate member of RhythMo research group, leading by Dr.Lan Xu, mainly focusing on motion capture and motion generation. In my spare time, I'll do some thinking about known propositions and conclusion to inspire me to find new problems.

I have a broad interest on theoretical computer science, including algorithms design and analysis, automata theories and complexity theories. Also, I am interested in thinking algorithms and theories in terms of mathematics and find new explanations for them.

I have taken part in some academic activities. I am a member of RhythMo research group and contributed as a third author to a paper that has now been accepted by CVPR. As a member of ACM club, I also have a lot of experience in competitions. I have been competing in algorithmic competitions (e.g. NOIp) since middle school.

I've been teaching assistant for several times not only because I reach excellent performance on those courses but also because I am also devoted on sharing my knowledge and understanding to others. I teach recitations and design homework(including writing assignments and programming assignments) for students.

GRADES

GPA: 3.65/4.00
GPA in major electives: 3.83/4.00
GPA in TCS courses:4.00/4.00
GPA in math courses:3.93/4.00
GPA in AI courses:3.75/4.00
Rank:(now)33/178 (best)19/180

STRENGTHS

Hard-working   Motivated
Willing to explore

REFEREES

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