SIJIN CHEN

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EDUCATION

Master, Engineering in Electrical and Electronics (GPA 3.56/4.00, rank 30/351)Sep. 2021 - Jun. 2024Fudan University. Supervised by Prof. Tao Chen.Shanghai, ChinaBachelor, Data Science (GPA 3.20/4.00)Sep. 2017 - Jun. 2021Fudan University.Shanghai, China

RESEARCH INTERESTS

Multi-modal Learning
3D Vision
Vision and Language
3D and 2D
3D detection

PUBLICATIONS AND PRE-PRINTS (GOOGLE SCHOLAR)

End-to-End 3D Dense Captioning with Vote2Cap-DETR.
Sijin Chen, Hongyuan Zhu, Xin Chen, Yinjie Lei, Gang Yu, Tao Chen[†]
[CVPR 2023 | paper | github | youtube]
[Summary]: We address 3D Dense Captioning as a set prediction problem with parallel decoding.

Vote2Cap-DETR++: Decoupling Localization and Describing for End-to-End 3D Dense Captioning.
Sijin Chen, Hongyuan Zhu, Mingsheng Li, Xin Chen, Peng Guo, Yinjie Lei, Gang Yu, Taihao Li, Tao Chen[†]
[Pre-print | paper | github]

[Summary]: Decoupled feature extraction and task decoding for 3D Dense Captioning.

WI3D: Weakly Incremental 3D Detection via Visual Prompts.
Mingsheng Li, <u>Sijin Chen</u>, Shengji Tang, Hongyuan Zhu, Fukun Yin, Tao Chen[†]
[Under Review]

[Summary]: Introduce novel concepts to a 3D object detector with 2D foundation models.

OTHER PROJECTS

Self-Supervised Pre-training on 3D Point Clouds.

Oct. 2020 - May. 2021

<u>Undergraduate Thesis</u> supervised by Prof. Tao Chen. Developed a self-supervised learning algorithm that learns global- and patch-level contrastive representations for 3D point clouds.

SCHOLARSHIPS AND AWARDS

National Award (rank 1/46).	Sep. 2023
Second prize of the Scholarship for Outstanding Students at Fudan University.	Sep. 2022
Award for the Scholarship for Outstanding Students at Fudan University.	Sep. 2021
Second prize of the Scholarship for Outstanding Students at Fudan University.	Jun. 2021
First place winner of the Scan2Cap Challenge at ICCV 2023.	Oct. 2023

ORAL PRESENTATIONS

Winner presentation of the Scan2Cap Challenge at ICCV 2023. [slides]	Oct. 2023
Paper presentation at the workshop for 3D vision, VALSE 2023.	Apr. 2023

Internships

Huawei Technologies Shanghai R&D Center.

Jul. 2020 - Oct. 2020

AI Engineer, Supervised by Dr. Zhiwen Cheng. Convex Optimization Algorithms for Compressed Sensing.

REFERENCES

Prof. Tao Chen Supervisor Fudan University eetchen@fudan.edu.cn