

Ziyang Leng

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EDUCATION BACKGROUND

Southern University of Science and Technology (SUSTech)

Bachelor of Science in Computer Science and Engineering (in progress)

GPA: 3.9/4.0, Rank: 3/217

Shenzhen, China

Sep. 2020 - Jul. 2024

University of California, Berkeley

International Study Program

GPA: 4.0/4.0, Core Courses: *Designing, Visualizing and Understanding Deep Neural Networks* (A), *Introduction to Machine Learning* (A+)

Berkeley, CA

Jan. 2023 - May. 2023

RESEARCH & PROJECT EXPERIENCE

Bird-Eye View Representation Learning for Perception

May 2023 - present

Member, Prof. Bolei Zhou's Lab at the University of California, Los Angeles

- Improved the quality of BEV representation by integrating dense contrastive learning and achieved better performance in downstream detection tasks
- Aligned the optimization of contrastive loss with detection loss to enable the synergy between booming image backbone and BEV detectors

Unsupervised Domain Adaptation from Simulation to Reality

Sep. 2022 - Dec. 2022

- Focused on the unsupervised domain adaptation from simulation to real-world datasets, considering the domain gap between simulation-generated and real-world captured scenes
- Utilized feature augmentation and mean teacher paradigm to construct a self-training pipeline which takes in a model trained on simulation domains and boosts its performance on real-world datasets

Improvement of ST3D Using Mean Teacher Paradigm

Jan. 2022 - Jul. 2022

- Utilized pseudo-label based UDA along with mean-teacher paradigm, reducing the noise of generated pseudo labels to achieve efficient domain adaptation and increase the accuracy of trained model on target domain
- Achieved increase in the 3D detection tasks such as 2-5 AP increase in KITTI detection tasks w.r.t. vehicles by amending the structure of ST3D with mean-teacher paradigm

AWARDS & HONORS

3rd Prize, SUSTech Outstanding Student Scholarship

Oct. 2023

Huawei Intelligent Pedestal Scholarship

Mar. 2023

2nd Prize, SUSTech Outstanding Student Scholarship

Oct. 2022

SUSTech Outstanding Student Assistant

Jun. 2022

Gold Prize, 2021 International Music and Art Festival IACDA Fall Series, Piano Solo

Jan. 2022

1st Prize, SUSTech Outstanding Student Scholarship

Oct. 2021

3rd Prize, SUSTech Outstanding Freshman Scholarship

Sep. 2020

SKILLS

Coding

Python (Fluent), PyTorch(Fluent), Java(Fluent), C/C++(Fluent), SQL, Verilog

Computer Vision

Object Detection, Domain Adaptation

OPEN-SOURCE PROJECTS

questdb	Contributor	https://github.com/questdb/questdb
FeatureProbe	Contributor	https://github.com/FeatureProbe
assertj	Contributor	https://github.com/assertj/assertj

EXTRACURRICULAR ACTIVITY

Student Assistant, CSE Department, SUSTech **2021 - present**

- Served as Student Assistant for courses including Principles of Database Systems, C/C++ Program Design, and Computer Networks

SUSTech Piano Club **Sep. 2020 - Dec. 2022**

- Participated in piano performances and competitions on different occasions, such as the College Welcome Festival, Shenzhen Concert Hall Afternoon Music Time, etc