# XIAOYU YE

#### PERSONAL DATA

NAME: Xiaoyu Ye (冶晓宇)

GENDER: Male

PLACE AND DATE OF BIRTH: Shenzhen, China | 27 Nov 2001

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HOME PAGE https://victor-xiaoyu-ye.github.io/

GITHUB: https://github.com/victor-cilay

#### **EDUCATION**

08/2024-Now | Ph.D. in Future Network of Intelligence Institute, CUHK(SZ)

Supervisor: Zhen Li

10/2023-04/2024 | International Exchange Student

Technical University of Munich (TUM), Germany

Major: Informatics(Computer Science)

10/2020-06/2024 | Bachelor of Science in Cyberspace Science and Technology

Beijing Institute of Technology (BIT), China

GPA: 81.5/100

#### RESEARCH EXPERIENCE

05/2024-08/2024 | Research Assistant at Deep Bit Lab

Future Network of Intelligence Institute, Chinese University of

Hong Kong, Shen Zhen

3D Single Object Tracking, 3DGS Large scene reconstruction

Co-advised by Zhen Li, Shuguang Cui

04/2023-10/2023 | Research Intern at DISCOVER Lab

Institute for Al Industry Research, Tsinghua University

Neural 3D Representation, 3D Computer Vision

Co-advised by Yongling Shi, Hao Zhao, and Guyue Zhou

#### **SELECTED PUBLICATIONS**

#### **Conference Proceedings**

[1] B. Xiong, X. Ye, T. H. E. Tse, K. Han, et al., SA-GS: Semantic-Aware Gaussian Splatting for Large Scene Reconstruction with Geometry Constrain, 2024. arXiv: 2405.16923 [cs.CV]. URL: https://saliteta.github.io/SA-GS-public/.

- [2] B. Ye, C. Liu, X. Ye, Y. Chen, et al., "Blending distributed nerfs with tri-stage robust pose optimization," in *International Conference on Intelligent Robots and Systems(IROS)*, Oral Pitch, 2024. arXiv: 2405.02880 [cs.CV].
- [3] Z. Wu, T. Liu, L. Luo, Z. Zhong, et al., "MARS: An Instance-aware, Modular and Realistic Simulator for Autonomous Driving," in *CAAI International Conference on Artificial Intelligence (CICAI)*, Best Paper Runner-up Award, Jul. 2023. arXiv: 2307.15058 [cs].

# **PROJECTS**

### 1 NeRF-based Simulator for Complex Dynamic Outdoor Driving Scene

- Proposed a state-of-the-art solution for reconstructing complex dynamic outdoor driving scenes using compositional neural radiance fields.
- Implemented an agile code framework that built upon NeRFStudio as tech leader.
- Published a conference paper [3] in CICAI 2023, we delivered an oral presentation, and got the Best Paper Runner-up Award.

#### 2 Brain Diseases Diagnosis Based on CT Image

- Conducted a student research project, which received support from the academy, that focused on the development of a model that provides early diagnosis reports for brain diseases based on the symmetry characteristic of CT images.
- This project utilized advanced image processing techniques and model pre-training
  to achieve a high degree of accuracy in generating diagnose reports. The main
  contribution of this project was the development of an innovative approach to the
  early detection of brain diseases, which has the potential to significantly improve
  patient outcomes.

## 3 Campus Errand Service Platform on Mini Program

- Designed and developed BETArrive, a campus service platform that enables students to act as both customers and service providers. The platform was designed with a user-friendly GUI and a full management system running on a cloud server, with the aim of enhancing the delivery of campus services. BETArrive offers a novel platform to campus service delivery by enabling students to participate in the service provision process, and has the potential to promote greater efficiency and inclusivity in the delivery of campus services.
- Project repository: https://github.com/victor-cilay/BETArrive

# 4 Blockchain Phishing Node Based on Machine Learning Recognition and knowledge map visualization software

• Developed a system to assist users in avoiding phishing nodes and preventing blockchain fraud.

- This project involved the development of a machine learning model that was trained
  on existing transaction data, as well as the creation of a knowledge graph and visualization software. Through the implementation of these tools, the project was
  able to effectively prevent blockchain fraud by enabling users to identify and avoid
  phishing nodes.
- Designed the mechanism for message synchronization.
- Project repository: https://github.com/victor-cilay/Phishing-node-visualization

#### EXTRACURRICULAR ACTIVITIES

• OFFICE MANAGER, BIT Student Union

11/2020-9/2021

• MANAGER, School Coffee House

03/2022-06/2023

• Several International Work&Communication Experience

#### **HONORS & AWARDS**

• Rank40/250+ in LSSEC TECH Program design competition

10/2021

- Silver Medal in the 8th China International "Internet +" College Students Innovation and Entrepreneurship Competition in Beijing Division Rematch Industry Proposition Track
- Third Prize in the 18th "Challenge Cup" National Undergraduate curricular academic science and technology works by race known as the Chinese college students of academic science and technology "Olympic" event
   04/2023
- · Distinct student union officer

#### **SKILLS & INTERESTS**

LANGUAGES: Chinese (native), English (fluent)

PROGRAMMING LANGUAGES: C/C++, Python, Java, JavaScript

OPERATING SYSTEMS: Linux, Windows

MACHINE LEARNING TOOLCHAIN: Markdown, LTeX, NeRFStudio, PyTorch

HOBBIES: Swim