YIHENG XIONG

+49 152-28036901 ♦ Munich, Germany

yiheng.xiong@tum.de viongyiheng.github.io

EDUCATION

Master of Informatics, Technical University of Munich

Oct. 2020 - Dec. 2023

Bachelor of Software Engineering, Nanjing University

Sept. 2016 - Jul. 2020

RESEARCH AND INDUSTRY EXPERIENCE

Research Intern
TUM 3D AI Lab
Jan. 2024 - May 2024
Munich, Germany

• Probabilistic 3D shape generation from a highly-ambiguous RGB image.

Research Assistant

TUM 3D AI Lab

Apr. 2022 - Sept. 2022

Munich, Germany

- Developed ScanNet200 benchmark;
- iOS app development based on ARKit.

Research Assistant

Apr. 2021 - Sept. 2021

TUM Model-based Systems and Qualitative Reasoning Group

Munich, Germany

- Managed and configured AWS cloud server;
- Configured and developed docker images.

Software Development Intern

Nanjing Weiwu Internet Technology Co., Ltd

Sept. 2019 - Dec. 2019 Nanjing, China

- Developed and maintained websites;
- Managed databases.

PUBLICATIONS

Y. Xiong, A. Dai. PT43D: A Probabilistic Transformer for Generating 3D Shapes from Single Highly-Ambiguous RGB Images. *BMVC* 2024.

Arxiv | Code | Video

Y. Xiong*, J. Liu*, K. Zaripova*, S. Sharifzadeh, M. Keicher†, N.Navab†. Prior-RadGraphFormer: A Prior-Knowledge-Enhanced Transformer for Generating Radiology Graphs from X-Rays. *MICCAI workshop* 2023.

Arxiv | Paper | Code

RESEARCH PROJECTS

Structured Medical Report Generation

Apr. 2022 - Jul. 2022

Supervisor: Prof. Nassir Navab

Munich, Germany

- Generated structured medical report dataset from radiology graphs labels (RadGraph);
- Proposed Structure Generation Transformer where given X-ray images the outputs are structured reports.

Slides

3D Object Detection and Relocalization in Indoor Scenes

Oct. 2021 - Feb. 2022

Supervisor: Prof. Matthias Nießner

Munich, Germany

^{*} denotes equal contribution and † denotes shared last authorship.

- Fine-tuned and modified VoteNet and CenterPoint to detect objects on 3RScan and ScanNet dataset;
- Re-defined 3D relocalization and conducted experiments with VoteNet and CenterPoint in 3RScan.

Report

SKILLS

Languages Python, Java, SQL, PHP, C++, Swift

Frameworks Pytorch, Tensorflow

TEACHING EXPERIENCE

Teaching Assistant

Introduction to Informatics (IN8027)

Jan. 2022 - Feb. 2022 Munich, Germany