YIHENG XIONG

+49 152-28036901 ⋄ Munich, Germany
yiheng.xiong@tum.de ⋄ xiongyiheng.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 — Jan. 2024 - May 2024
TUM 3D AI Lab — *Munich, Germany*

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

Research Assistant — Apr. 2022 - Sept. 2022
TUM 3D AI Lab — *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 — Sept. 2019 - Dec. 2019
Nanjing Weiwu Internet Technology Co., Ltd — *Nanjing, China*

- Developed and maintained websites;
- Managed databases.

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*

- 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

PUBLICATIONS

* denotes equal contribution and † denotes shared last authorship.

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

SKILLS

Languages	Python, Java, SQL, PHP, C++, Swift
Frameworks	Pytorch, Tensorflow

TEACHING EXPERIENCE

Teaching Assistant Jan. 2022 - Feb. 2022
Introduction to Informatics (IN8027) *Munich, Germany*