# YIHENG XIONG

+49 152-28036901  $\diamond$  Munich, Germany

Email ♦ LinkedIn ♦ Website

## **EDUCATION**

Master of Informatics, Technical University of Munich

2020 - 2023

Bachelor of Software Engineering, Nanjing University

2016 - 2020

#### **PUBLICATION**

- **Y. Xiong**, A. Dai. PT43D: A Probabilistic Transformer for Generating 3D Shapes from Single Highly-Ambiguous RGB Images. *Under Review* 2024.
- 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. *GRAIL @ MICCAI* 2023.

Arxiv | Paper | Code

## RESEARCH PROJECTS

# Probabilistic 3D Shape Generation from an RGB Image

2023

Supervisor: Prof. Angela Dai

Munich, Germany

- Introduced a multi-hypothesis synthetic data augmentation approach;
- Proposed a transformer-based autoregressive model to generate the probabilistic distribution of 3D shapes conditioned on an RGB image containing potentially highly ambiguous observations of the object.

Thesis

## Structured Medical Report Generation

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

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

# **SKILLS**

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

Frameworks Pytorch, Tensorflow

#### TEACHING EXPERIENCE

#### Teaching Assistant

2022

Introduction to Informatics (IN8027)

Munich, Germany

<sup>\*</sup> denotes equal contribution and # denotes shared last authorship.