# **Yiheng Xiong**

Email address: yiheng.xiong@tum.de

**Website:** <a href="https://xiongyiheng.github.io/">https://xiongyiheng.github.io/</a>

#### **EDUCATION AND TRAINING**

#### **Master of Science in Informatics**

**Technical University of Munich** [ 10/2020 - Current ]

# **Bachelor of Engineering in Software Engineering**

**Nanjing University** [ 09/2016 - 07/2020 ]

#### **PROJECTS**

# **Structured Report Generation**

[ 05/2022 - Current ]

Supervisor: Prof. Dr. Nassir Navab and M.Sc. Kamilia Zaripova

- Generating structured report dataset from scene graphs labels (RadGraph);
- Investigating several neural models that as input will have the imaging data and as output should present structured report.

# **3D Object Detection and Relocalization in Indoor Scenes**

[10/2021 - 02/2022]

Supervisor: Prof. Dr. Matthias Nießner and M.Sc. Yujin Chen

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

# **3D Object Detection in Self-driving Cars**

[ 04/2021 - 10/2021 ]

Supervisor: Prof. Dr. Daniel Cremers and Prof. Dr. Matthias Nießner

- Fine-tuned and modified PointNet and PointNet++ on semanticKITTI dataset;
- Adopted modified PointNet++ as backbone in VoteNet and fine-tuned the whole on KITTI 3D object detection dataset.

#### **WORK EXPERIENCE**

#### **Research Assistant**

**TUM 3D AI Group** [ 05/2022 - Current ]

Supervisor: Prof. Dr. Angela Dai and M.Sc. Dávid Rozenberszki

Developing ScanNet200 benchmark.

#### **Research Assistant**

# TUM Model-based Systems & Qualitative Reasoning Group [ 05/2021 - 09/2021 ]

Supervisor: Prof. Dr. Peter Struss

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

### **Software Engineer**

Nanjing Weiwu Internet Technology Co., Ltd. [ 09/2019 - 12/2019 ]

Supervisor: Feng Han

- Developed & maintained the website of the company;
- Managed databases.

#### **DIGITAL SKILLS**

### Languages

Python / Java / HTML / SQL

### **Development environments**

Linux

#### **Frameworks**

PyTorch

#### **TEACHING EXPERIENCES**

# **Tutor for Introduction to Informatics (IN8027)**

[ 01/2022 - 02/2022 ]

• Addressed theoretical and coding questions raised by students during weekly office hours.