Yiheng Xiong

Email address: yiheng.xiong@tum.de **Website:** https://xiongyiheng.github.io/

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]

WORK EXPERIENCE

Research Assistant
TUM 3D AI Group [06/2022 – Current]

Supervisor: Prof. Dr. Angela Dai
- Developing ScanNet200 benchmark.
- IOS development based on ARkit.

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 and maintained websites;
- Managed databases.

PROJECTS

Structured Report Generation
[05/2022 – Current]

Supervisor: Prof. Dr. Nassir Navab and Kamilia Zaripova

- Generating structured report dataset from scene graphs labels (RadGraph);
- Investigating deep learning methods where given X-ray images the outputs are structured reports.

3D Object Detection and Relocalization in Indoor Scenes

[10/2021 – 02/2022]

Supervisor: Prof. Dr. Matthias Nießner and Yujin Chen

- 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.

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.

DIGITAL SKILLS

My Digital Skills

Languages

Python / Java / SQL / C++ / PHP / JavaScript / HTML / MatLab

Frameworks

PyTorch / TensorFlow

TEACHING EXPERIENCES

Tutor for Introduction to Informatics (IN8027)

[01/2022 – 02/2022]

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