



# Yiheng Xiong

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## EDUCATION AND TRAINING

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### 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

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### Structured Report Generation

[ 05/2022 – 07/2022 ]

*Supervisor: Prof. Dr. Nassir Navab and Kamilia Zaripova*

- Generated structured report dataset from scene graphs labels (RadGraph);
- Proposed Structure Generation Transformer 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.

## WORK EXPERIENCE

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### 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.

## **DIGITAL SKILLS**

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### **Languages**

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

### **Frameworks**

PyTorch / TensorFlow

## **TEACHING EXPERIENCES**

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

[ 01/2022 – 02/2022 ]

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