

# QI LI

Building Zijing #1, Tsinghua University, Beijing, 100084  
(+86)15801266030 ◊ liqi17@mails.tsinghua.edu.cn

## EDUCATION

### Tsinghua University, Beijing

Aug. '18 - present

BSc in Software Engineering, School of Software

Major GPA: **3.93**/4.00 (Rank: **2**/92); Minor in Statistics: **4.00**/4.00

## PUBLICATIONS

- **Q Li**, K Mo, Y Yang, H Zhao, L Guibas, "Learning Inter-object Functional Relationships in 3D Indoor Scenes", In submission to International Conference on Learning Representations (ICLR 2022).
- **Q Li**, Y Wang, Y Wang, H Zhao, "HDMaNet: An Online HD Map Construction and Evaluation Framework", in Conference on Computer Vision and Pattern Recognition (CVPRW 2021, **Best workshop paper nominee**).
- H Peng, H Du, H Yu, **Q Li**, J Liao, J Fu, "Cream of the Crop: Distilling Prioritized Paths For One-Shot Neural Architecture Search", in Neural Information Processing Systems (NeurIPS 2020).
- B Liu, Y Cao, T Qiu, **Q Li**, H Hu, Z Zhang, M Long, H Hu, "Negative Margin Matters: Understanding Margin in Few-shot Classification", in European Conference on Computer Vision (ECCV 2020 **Spotlight**).

## RESEARCH EXPERIENCE

### Stanford University

Apr. '21 - present

*Research Assistant (UGVR program), Supervisor: Prof. Leonidas Guibas*

*Beijing, PRC*

- A novel benchmark of learning indoor multi-object functional relationships based on prior knowledge and interaction policy. By learning from the interaction, our model predicts functional relationships in the AI2-Thor environment.

### Tsinghua University

Dec. '20 - present

*Research Assistant, Supervisor: Prof. Hang Zhao*

*Beijing, PRC*

- A new benchmark of predicting local HD Map using onboard sensors, which is much more scalable than global mapping. The developed baseline method achieves high quality and consistent results on the nuScenes dataset.

### Microsoft Research Asia

Jan. '20 - Sept. '20

*Research Intern, Supervisor: Researcher Houwen Peng*

*Beijing, PRC*

- Ranking candidate architectures using parameters from the upernet. Through a self-supervised training pipeline, our method improved the Kendalls Tau ranking correlation on the NAS-Bench-201 from 0.2 to 0.5.

### Tsinghua University

Aug. '19 - Nov. '19

*Research Assistant, Supervisor: Prof. Mingsheng Long and Researcher Han Hu*

*Beijing, PRC*

- In contrast to positive margin in traditional tasks, we integrated negative margin to the softmax loss, to benefit the few-shot classification. Model with negative-margin can achieve SOTA on numerous few-shot tasks.

### Kuaishou Technology

Jun. '19 - Aug. '19

*Research Intern, Supervisor: Researcher Wenkui Ding*

*Beijing, PRC*

- Detecting offensive content in videos acquired from the Kuaishou App using object detection and language model. Our model allowed us to detect 20% more offensive videos after synthesizing all detection models.

## PROJECTS

- Content-based and collaborative-based movie recommendation systems.
- An easy-to-use software to label images for object detection or segmentation.
- A simple chatting app on the Android platform.
- The Lost-and-Found platform for Tsinghua University.

## AWARDS AND HONORS

- 2<sup>nd</sup> prize of the ImageNet-A Challenge in Kaggle in-class competition (Rank 2/21)
- 3<sup>rd</sup> prize of the Mathematical Contest in Modeling of Tsinghua University (Rank 10/91)
- School Fund Scholarship of Tsinghua University (Rank 5/91)
- Hong Kong Dong Fund Scholarship (Rank 8/91)

## SELECTED SKILLS

### Computer Skills

C/ C++, Java, Python, Pytorch, TensorFlow, MATLAB, Lingo

### English

TOEFL: 105/120 GRE: 323/340 (AW 3.5/6.0)