QI LI

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EDUCATION

UCLA, Los Angeles *Sept. '22 - present*
Ph.D. in Computer Science

Tsinghua University, Beijing *Aug. '18 - Jun. '22*
BE in Software Engineering
GPA: **3.93**/4.00 (Rank: **2**/92);

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, "HDMapNet: An Online HD Map Construction and Evaluation Framework", in Conference on Computer Vision and Pattern Recognition (ICRA 2022).

- 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.

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 Reasearch Asia *Jan. '20 - Sept. '20*
Research Intern, Supervisor: Researcher Houwen Peng *Beijing, PRC*
· Ranking candidate architectures using parameters from the supernet. 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

- Collaborative-based movie recommendation systems
- Control system for two-wheeled self-balancing cars
- Wireless data transfer and ranging by sound waves
- Lost-and-Found platform for Tsinghua
- C to LLVM compiler
- piVC verifying compiler
- Multi-user chat room written in assembly
- FTP client and server
- Annotating software for segmentation and detection
- Web page and backend for a rental platform

HONORS AND MEMBERSHIPS

- 2^{nd} prize of the ImageNet-A Challenge in Kaggle
- 3^{rd} prize of the Mathematical Contest in Modeling
- Toyota Fund Scholarship (Rank 3/92)
- Optics Valley Fund Scholarship (Rank 2/92)
- Hong Kong Dong Fund Scholarship (Rank 5/92)
- Outstanding TA of *Social Services of Colleage students*

SELECTED SKILLS

Computer Skills C/ C++, Java, Python, Pytorch, TensorFlow, MATLAB, Lingo
English TOEFL: 107/120