

HAIWEN HUANG

DEDICATED TO DEVELOPING SAFE, ROBUST, AND RESPONSIBLE AI TECHNOLOGIES THAT ENRICH OUR WORLD
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EDUCATION

University of Tübingen, Tübingen, Germany	Jan. 2022 – June 2026 (expected)
PhD candidate in Computer Vision	
<ul style="list-style-type: none">Autonomous Vision Group, Bosch Industry-on-Campus labSupervisor: Andreas Geiger, Dan ZhangPhD topic: Open-world recognition in complex scenes	
University of Oxford, Oxford, UK	Oct. 2020 – Sept. 2021
Master of Science in Computer Science	
<ul style="list-style-type: none">DistinctionDissertation: “On Representation Learning for Deterministic Uncertainty Estimation”Supervisor: Yarin Gal	
Peking University, Beijing, China	Sept. 2015 – July 2019
Bachelor of Science in Computational Mathematics	
<ul style="list-style-type: none">Cumulative GPA: 3.73/4.00, Major GPA: 3.80/4.00Outstanding Graduate of Beijing (top 1% in the university)Advisor: Bin Dong	
University of California, Los Angeles, USA	Sept. 2017 – Feb. 2018
Exchange Student in Department of Statistics	
<ul style="list-style-type: none">CSC Scholarship RecipientGPA: 4.0/4.0Advisor: Yingnian Wu, Songchun Zhu	

WORK EXPERIENCE

Google Research	July 2025 - Oct. 2025
<ul style="list-style-type: none">Student ResearcherAdvisor: Yongqin Xian, Alessio Tonioni, Federico TombariProject: Improving video reasoning abilities of multimodal LLMs	
Megvii Research, Beijing, China	July 2019 – Sept. 2020
<ul style="list-style-type: none">Research scientist in Face Recognition TeamAdvisor: Xinyu ZhouProject: Billion-scale face recognition data annotation. Out-of-distribution detection for facial data.	

SELECTED PUBLICATIONS

1. **Haiwen Huang**, Anpei Chen, Volodymyr Havrylov, Andreas Geiger, Dan Zhang. “*LoftUp: Learning a Coordinate-Based Feature Upsampler for Vision Foundation Models*” ICCV 2025 **(oral)**.
2. **Haiwen Huang**, Songyou Peng, Dan Zhang, Andreas Geiger. “*Renovating Names in Open-Vocabulary Segmentation Benchmarks*” NeurIPS 2024
3. **Haiwen Huang**, Andreas Geiger, and Dan Zhang. “*GOOD: Exploring geometric cues for detecting objects in an open world.*” ICLR 2023
4. **Haiwen Huang**, Zhihan Li, Lulu Wang, Sishuo Chen, Xinyu Zhou, Bin Dong, “*Feature Space Singularity for Out-of-distribution Detection.*” **(Best Paper Runner-Up)** Safe AI 2021.

5. **Haiwen Huang**, Chang Wang, and Bin Dong. “*Nostalgic Adam: Weighting More of the Past Gradients when Designing the Adaptive Learning Rate.*” IJCAI 2019.

HIGHLIGHTS OF TECHNICAL SKILLS

- **Machine Learning Frameworks:** Proficient with PyTorch, TensorFlow, NumPy, Scikit-learn, Hugging Face, Gradio, and more.
- **Computer Vision:** Experience in tasks including image classification, object detection, (interactive) segmentation, depth/normal estimation, video object segmentation, and object tracking.
- **Vision & Multimodal Models:** Familiar with state-of-the-art models such as Mask2Former, DINOv2, CLIP, SigLIP, Stable Diffusion, Flux, among others, and with various LLMs such as Qwen, InternVL, GPT-4 and Gemini for text & multimodal tasks.
- **Parameter-Efficient Fine-Tuning:** Skilled in techniques like LoRA variants, ControlNet, and T2I adapters for fine-tuning foundation models, including Stable Diffusion and DINOv2.
- **Data-Centric Model Evaluation & Development:** Contributed to projects involving data collection, augmentation, and synthesis, and evaluation of foundation models on various vision-language tasks such as VQA and open-voc segmentation, with a focus on robustness and explainability.

SELECTED AWARDS AND HONORS

NeurIPS 2024 Top Reviewer Award. Top 10% reviewers in NeurIPS 2024.

Outstanding Graduate of Beijing. The highest honor for graduates in Beijing. Top 1% in university. 2019

Yang Fuqing & Wang Yangyuan Academician Scholarship. Top 1% in academic merit and potential. 2016