

# Junlin Han

webpage: <https://junlinhan.github.io/> | email: [junlinhcv@gmail.com](mailto:junlinhcv@gmail.com) | [google scholar](#)

## EDUCATION

---

### Australian National University

Bachelor of Information Technology (Honours)

GPA: 3.95/4.00 (WES converted)

02.2019 – 06.2023

Canberra, Australia

Expected to graduate with first-class honours

## RESEARCH STATEMENT

---

My research focus on computer vision, deep learning, and artificial intelligence, with a particular concentration on *achieving human-like visual intelligence through data-centric methodologies*. This entails exploring:

- (1) **Generation** and **manipulation** of 2D, 3D, and 4D visual data,
- (2) Use **augmented, synthetic, and distilled** data for training computer vision systems,
- (3) Understand the **role of data** through cognitive perspectives.

## EXPERIENCE

---

### Visiting Research Intern

AIML, University of Adelaide

Advisor/Host: [Prof. Ian Reid](#)

Topics: data-centric AI, visual recognition, memorability

12.2021 – 05.2023

Adelaide, Australia

### Research Student

Data61-CSIRO & Australian National University

Advisors: [Dr. Lars Petersson](#) and [Prof. Hongdong Li](#)

Topics: low-level vision, generative models, self-supervised learning

08.2020 – 05.2023

Canberra, Australia

## SELECTED PUBLICATIONS

---

See my [webpage](#) for full publications, codes, datasets, and project pages, etc.

What Images are More Memorable to Machines?

**Junlin Han**, Huangying Zhan, Jie Hong, Pengfei Fang, Hongdong Li, Lars Petersson, Ian Reid

*Preprint arXiv:2211.07625*

You Only Cut Once: Boosting Data Augmentation with a Single Cut

**Junlin Han**, Pengfei Fang, Weihao Li, Jie Hong, Ali Armin, Ian Reid, Lars Petersson, Hongdong Li

*International Conference on Machine Learning (ICML)*, 2022

Blind Image Decomposition

**Junlin Han**, Weihao Li, Pengfei Fang, Chunyi Sun, Jie Hong, Ali Armin, Lars Petersson, Hongdong Li

*European Conference on Computer Vision (ECCV)*, 2022

## PROFESSIONAL ACTIVITIES

---

**Conference review:** CVPR 2022 2023, NeurIPS 2022 2023, ICML 2022, ECCV 2022, ICLR 2023, ICCV 2023, ACCV 2022, AAAI 2023, BMVC 2023

**Journal review:** Transactions on Image Processing (TIP), Pattern Recognition, Neurocomputing, Journal of Oceanic Engineering (JOE)

**Workshop review:** NTIRE (CVPRW) 2021

## TECHNICAL SKILLS

---

**Programming Languages:** Proficient in Python, MATLAB

Familiar with Java, SQL, HTML/CSS, R, Haskell, Assembly (ARMV7)

**Developer Tools:** Git, Latex, VS Code, Visual Studio, PyCharm, IntelliJ, Jupyter Notebook

**Libraries:** PyTorch, NumPy

## AWARDS

---

<b>Top Reviewer</b> <i>NeurIPS (Conference on Neural Information Processing Systems)</i>	2022
<b>Second Best Presentation Award</b> <i>AIM (Active Integrated Matter) Conference</i>	2021
<b>Top-up Scholarship</b> <i>for research work at Data61-CSIRO</i>	2021
<b>Undergraduate Vacation Scholarship</b> <i>for summer research at Data61-CSIRO</i>	2020

## FULL PUBLICATIONS

---

11. What Images are More Memorable to Machines?  
**Junlin Han**, Huangying Zhan, Jie Hong, Pengfei Fang, Hongdong Li, Lars Petersson, Ian Reid  
*Preprint arXiv:2211.07625*
10. CropMix: Sampling a Rich Input Distribution via Multi-Scale Cropping  
**Junlin Han**, Lars Petersson, Hongdong Li, Ian Reid  
*Preprint arXiv:2205.15955*
9. You Only Cut Once: Boosting Data Augmentation with a Single Cut  
**Junlin Han**, Pengfei Fang, Weihao Li, Jie Hong, Ali Armin, Ian Reid, Lars Petersson, Hongdong Li  
*International Conference on Machine Learning (ICML), 2022*
8. Blind Image Decomposition  
**Junlin Han**, Weihao Li, Pengfei Fang, Chunyi Sun, Jie Hong, Ali Armin, Lars Petersson, Hongdong Li  
*European Conference on Computer Vision (ECCV), 2022*
7. Underwater Image Restoration via Contrastive Learning and a Real-world Dataset  
**Junlin Han**, Mehrdad Shoeiby, Tim Malthus, Elizabeth Botha, Janet Anstee, Saeed Anwar, Ran Wei, Ali Armin, Hongdong Li, Lars Petersson  
*Remote Sensing, 2022*
6. Single Underwater Image Restoration by Contrastive Learning  
**Junlin Han**, Mehrdad Shoeiby, Tim Malthus, Elizabeth Botha, Janet Anstee, Saeed Anwar, Ran Wei, Lars Petersson, Ali Armin  
*IEEE International Geoscience and Remote Sensing Symposium (IGARSS, oral), 2021*
5. Dual Contrastive Learning for Unsupervised Image-to-Image Translation  
**Junlin Han**, Mehrdad Shoeiby, Lars Petersson, Ali Armin  
*New Trends in Image Restoration and Enhancement workshop (NTIRE), IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (CVPRW, oral), 2021*
4. Hyperbolic Audio-visual Zero-shot Learning  
Jie Hong, Zeeshan Hayder, **Junlin Han**, Pengfei Fang, Mehrtash Harandi, Lars Petersson  
*Under review*
3. NeRFEditor: Differentiable Style Decomposition for Full 3D Scene Editing  
Chunyi Sun, Yanbin Liu, **Junlin Han**, Stephen Gould  
*Preprint arXiv:2212.03848*
2. GOSS: Towards Generalized Open-set Semantic Segmentation  
Jie Hong, Weihao Li, **Junlin Han**, Jiyang Zheng, Pengfei Fang, Mehrtash Harandi, Lars Petersson  
*Preprint arXiv:2203.12116*

1. Curved Geometric Networks for Visual Anomaly Recognition

Jie Hong, Pengfei Fang, Weihao Li, **Junlin Han**, Lars Petersson, Mehrtash Harandi

*Preprint arXiv:2208.01188*

REFERENCES

---

**Prof. Ian Reid**

Professor, FAA FTSE

Email: [ian.reid@adelaide.edu.au](mailto:ian.reid@adelaide.edu.au)

University of Adelaide

**Prof. Hongdong Li**

Professor

Email: [hongdong.li@anu.edu.au](mailto:hongdong.li@anu.edu.au)

Australian National University

**Dr. Lars Petersson**

Group Leader and Senior Principal Research Scientist

Email: [lars.petersson@data61.csiro.au](mailto:lars.petersson@data61.csiro.au)

Data61-CSIRO