

Junlin Han

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

EDUCATION

Australian National University

Bachelor of Information Technology (Honours)

GPA: 3.95/4.0 (converted)

02.2019 – 06.2023

Canberra, Australia

Expected to graduate with first class honours

RESEARCH INTERESTS

My research interests lie in **computer vision**, **deep learning**, and **artificial intelligence**. In particular, I study visual machines from two perspectives: (1) how to build intelligent machines that may perceive, learn, and think more like humans, and (2) unveil the perception and cognitive properties of machines.

EXPERIENCE

Visiting Research Intern

AIML, University of Adelaide

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

Topics: data-efficient learning, visual recognition, memorability

12.2021 – ongoing

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 – ongoing

Canberra, Australia

PUBLICATIONS

See my [webpage](#) for code, paper, dataset, project page, etc.

10. 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

9. CropMix: Sampling a Rich Input Distribution via Multi-Scale Cropping

Junlin Han, Lars Petersson, Hongdong Li, Ian Reid

Preprint arXiv:2205.15955

8. 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

7. 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

6. 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

5. 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

4. 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*

3. NeRFEditor: Differentiable Style Decomposition for Full 3D Scene Editing

Chunyi Sun, Yanbin Liu, **Junlin Han**, Stephen Gould

In submission

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

SERVICES

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

Top Reviewer 2022

NeurIPS (Conference on Neural Information Processing Systems)

Second Best Presentation Award 2021

AIM (Active Integrated Matter) Conference

Top-up Scholarship 2021

for research work at Data61-CSIRO

Undergraduate Vacation Scholarship 2020

for summer research at Data61-CSIRO

REFERENCES

Prof. Ian Reid

Professor, FAA FTSE

Email: ian.reid@adelaide.edu.au

University of Adelaide

Prof. Hongdong Li

Professor

Email: hongdong.li@anu.edu.au

Australian National University

Dr. Lars Petersson

Group Leader and Senior Principal Research Scientist

Email: lars.petersson@data61.csiro.au

Data61-CSIRO