Kelvin Cheng
1730 Varsity Dr, Raleigh, NC, United States, 27606 ☎ (919) 515 2858 kbcheng@ncsu.edu

CITIZENSHIP

Canadian

RESEARCH INTERESTS

3D Computer Vision, Machine Learning, Natural Language Processing, Data Science

PROFESSIONAL EXPERIENCES

ABB, Raleigh, United States, Summer 2020
Research Intern – Computer Vision and Perception

KPMG, Guangzhou, China, Summer 2013
Summer Intern - Consulting

EDUCATION

North Carolina State University, United States, 2019–2023
PhD (in progress), Department of Computer Science
- Advisors: Tianfu Wu, PhD
  Christopher Healey, PhD

Simon Fraser University, Vancouver, Canada, 2015–2019
MSc, Department of Computing Science
- Advisors: Ping Tan, PhD
- Thesis title: A Neural Network for Monocular Point Cloud Estimation of Humans

Simon Fraser University, Vancouver, Canada, 2010–2015
BSc, Department of Computing Science
- Bachelor's degree in Computing Science, specialize in Artificial Intelligence

PUBLICATIONS

Publications:
- Sicong Tang*, Feitong Tan*, Kelvin Cheng, Zhaoyang Li, Siyu Zhu, Ping Tan. A Neural Network for Detailed Human Depth Estimation from a Single Image (*oral presentation*). *International Conference on Computer Vision (ICCV)* Seoul, South Korea, Oct. 2019.

Working papers:
- Kelvin Cheng, Christopher Healey, Tianfu Wu. Towards Adversarially Robust and Domain Generalizable Stereo Matching by Rethinking DNN Feature Backbones. 2020.
- Kelvin Cheng, Christopher Healey, Tianfu Wu. Neural Volume Rendering based Self-Supervised Stereo Matching. 2021.

Theses:
- Kelvin Cheng. A Neural Network for Monocular Point Cloud Estimation of Humans. Master's thesis, Simon Fraser University, 2019.

PRESENTATIONS

Note that a dagger denotes refereed conference presentations given by a coauthor.

Sicong Tang, Feitong Tan, Kelvin Cheng, Zhaoyang Li, Siyu Zhu, Ping Tan. A Neural Network for Detailed Human Depth Estimation from a Single Image.
- International Conference on Computer Vision (ICCV)†, Seoul, South Korea, Nov 1, 2019.

SCHOLARSHIPS

- University Graduate Fellowship, North Carolina State University, 2019–2020 ($US 4,000)
- NSERC Undergraduate Student Research Awards, 2015 ($CAD 5,740)

OTHER RESEARCH PROJECTS

- Adaptable Deep Learning Based Depth Refinement for Infrared Stereo Cameras (ABB, 2020)
- Volumetric Reconstruction of Deformable Objects from RGB-D Images (SFU, 2018)
- Non-rigid Structure from Motion of Fabrics (SFU, 2017)

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TECHNICAL SKILLS
- Programming: Python, C++, C, MATLAB, R, Stata, Julia, JavaScript, Java, VBA
- Libraries: PyTorch, CUDA, TensorFlow, Pandas, OpenGL/WebGL, NLTK, Numpy

REVIEWING ACTIVITIES
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2022

LANGUAGES
- Cantonese (native)
- Mandarin (native)
- English (fluent)