Mian Wei

647-308-9363

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Education

PhD Candidate, University of Toronto Summer 2017 - Present

- Coded two-bucket imaging for computer vision
- Advisor: Kyros Kutulakos

Masters of Science, University of Toronto Fall 2015 - Spring 2017

- Single-shot indirect-invariant photometric stereo by coded two-bucket imaging
- Advisor: Kyros Kutulakos

Honours Bachelor of Science, University of Toronto Fall 2011 - Spring 2015
CGPA: 3.87/4.00

- Specialist in Computer Science and Major in Mathematics

Research Experience

Visiting scholar at University of Wisconsin-Madison under Mohit Gupta Summer-Winter 2018

- Scene flow under general illumination

Visiting scholar at Northwestern University under Oliver Cossairt Summer 2016

- Deflectometry for glossy objects

Research assistant for Kyros Kutulakos Fall 2014 - Spring 2015

- Transport-invariant photometric stereo
- Combining photometric stereo with computational photography to make photometric stereo more robust to indirect light

NSERC summer research student under Kyros Kutulakos Summer 2014

- Indirect-only imaging of skin
- Studied the performance of eulerian video magnification on indirect-only videos of skin

Research assistant in Statistics under Radu Craiu Fall 2013 - Spring 2014

- Studied Bayesian inference of copulas using an additive model and MCMCs
- Wrote a program in C++ to run the Bayesian Inference

NSERC summer research student in Statistics under Radu Craiu Summer 2013

- Programmed a MCMC (Monte Carlo Markov Chain) in C to analyze the performance under different MCMC structures
- Learned R for statistical analysis of the results

Work Experience

TA for CSC165: Mathematical Reasoning for CS	Fall 2013
TA for CSC236: Introduction to Theory of Computation	Winter 2014
TA for CSC373: Algorithm Design and Analysis	Fall 2014 - present
TA for CSC320: Introduction to Visual Computing	Spring 2015 - present
TA for CSC2503: Foundations of Computer Vision	Fall 2015 - present

Papers

Navid Sarhangnejad, Nikola Katic, Zhengfan Xia, **Mian Wei**, Nikita Gusev, Gairik Dutta, Rahul Gulve, Harel Haim, Manuel Moreno Garcia, David Stoppa, Kiriakos N. Kutulakos, and Roman Genov. (2019), *Dual-Tap Pipelined-Code-Memory Coded-Exposure-Pixel CMOS Image Sensor for Multi-Exposure Single-Frame Computational Imaging*, ISSCC, doi: 10.1109/ISSCC.2019.8662326

Mian Wei, Navid Sarhangnejad, Zhengfan Xia, Nikita Gusev, Nikola Katic, Roman Genov, and Kiriakos N. Kutulakos. (2018), *Coded Two-bucket Cameras for Computer Vision*, ECCV, doi: 10.1145/3083157.3083164

Mian Wei and Karan Singh. (2017), *Bend-a-rule: a fabrication-based workflow for 3D planar contour acquisition*, SCF, doi: 10.1145/3083157.3083164

Avideh Sabeti, **Mian Wei**, and Radu V. Craiu (2014), *Additive models for conditional copulas*, STAT, 3; pages 300-312, doi: 10.1002/sta4.64

Awards

Dr. John Knowles Colling Memorial Scholarship	2012
Betty Jean Boultbee Bursary	2013
The John and Gladys Miller Scholarship	2013
Trinity College Chancellor's Scholarship	2012, 2013
Trenwith Computer Science Award	2013, 2014
Alexander Graham Bell Canada Graduate Scholarship - Masters	2015
Computer Science Departmental Entrance Scholarship (top 2%)	2015
NSERC Postgraduate Scholarship	2017 - present