

MENG TANG

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Facebook Reality Labs

Redmond, WA, USA

EMPLOYMENT

Research Scientist in Machine Perception and Learning

May 2019 – present

Facebook Reality Labs, Redmond, WA, USA.

EDUCATION

Ph.D. in Computer Science

May 2019

University of Waterloo, Canada

Advisor: Yuri Boykov

M.Sc. in Computer Science

February 2014

Western University, Canada

B.E. in Automation

June 2012

Huazhong University of Science and Technology, China

PUBLICATION

Journals

1. Hoel Kervadec, Jose Dolz, **Meng Tang**, Eric Granger, Yuri Boykov, Ismail Ben Ayed, “Constrained-CNN losses for weakly supervised segmentation”, In *Medical Image Analysis (MedIA)*, Volume 54, P. 88-99, May 2019.
2. **Meng Tang**, Dmitrii Marin, Ismail Ben Ayed, Yuri Boykov, “Kernel Cuts: Kernel and Spectral Clustering Meet Regularization”, In *International Journal of Computer Vision (IJCV)*, 2018.
3. Dmitrii Marin, **Meng Tang**, Ismail Ben Ayed, Yuri Boykov, “Kernel Clustering: Density Biases and Solutions”, In *IEEE Trans. on Pattern Analysis and Machine Intelligence (PAMI)*, 2017.

Conferences

1. Dmitrii Marin, **Meng Tang**, Ismail Ben Ayed, Yuri Boykov, “Beyond Gradient Descent for Regularized Segmentation Losses”, In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Long Beach, USA, June 2019.
2. **Meng Tang**, Federico Perazzi, Abdelaziz Djelouah, Ismail Ben Ayed, Christopher Schroers, Yuri Boykov, “On Regularized Losses for Weakly-supervised CNN Segmentation”, In *European Conference on Computer Vision (ECCV)*, Munich, Germany, September 2018.
3. Hoel Kervadec, Jose Dolz, **Meng Tang**, Eric Granger, Yuri Boykov, Ismail Ben Ayed, “Size-constraint loss for weakly supervised CNN segmentation”, In *International conference on Medical Imaging with Deep Learning (MIDL)*, Amsterdam, Netherlands, July 2018.
4. **Meng Tang**, Abdelaziz Djelouah, Federico Perazzi, Yuri Boykov, Christopher Schroers, “Normalized Loss for Weakly-supervised CNN Segmentation”, In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Salt Lake City, USA, June 2018.
5. **Meng Tang**, Dmitrii Marin, Ismail Ben Ayed, Yuri Boykov, “Normalized Cut Meets MRF”, In *European Conference on Computer Vision (ECCV)*, Amsterdam, Netherlands, October 2016. (Oral, rate: 1.8%)
6. **Meng Tang**, Ismail Ben Ayed, Dmitrii Marin, Yuri Boykov, “Secrets of GrabCut and Kernel

- K-means”, In *IEEE International Conference on Computer Vision (ICCV)*, Santiago, Chile, December 2015.
7. **Meng Tang**, Ismail Ben Ayed, Yuri Boykov, “Pseudo-Bound Optimization for Binary Energies”, In *European Conference on Computer Vision (ECCV)*, Zurich, Switzerland, September 2014. (Oral, rate: 2.6%)
 8. **Meng Tang**, Lena Gorelick, Olga Veksler, Yuri Boykov, “GrabCut in One Cut”, In *IEEE International Conference on Computer Vision (ICCV)*, Sydney, Australia, December 2013.

Internship

Machine Learning Intern (part-time) <i>BorealisAI (RBC Research)</i> , Waterloo, ON.	<i>Nov. 2018 – May 2019</i> Host: Pascal Poupart
Research Intern <i>Disney Research Zürich</i> , Zürich, Switzerland.	<i>Aug. 2017 – Dec. 2017</i> Host: Christopher Schroers
Graduate Computer Vision Intern <i>A9.com</i> (an Amazon company), Palo Alto, CA.	<i>June. 2016 – Sept. 2016</i> Mentors: Edward Hsiao & Douglas Gray

TALKS

- “Advances in Weakly-supervised Image Segmentation”
 - In Pony.ai, Fremont, CA, Sept. 2018
 - In Microsoft, Redmond, WA, Oct. 2018
 - In Amazon, Seattle, WA, Oct. 2018
 - In Facebook, Menlo Park, CA, Oct. 2018
 - In SRI International, Princeton, NJ, Oct. 2018
 - In Megvii (Face++) Research, Redmond, WA, Oct. 2018
- “*Optimization for Image Segmentation*”
 - In Nvidia, Toronto, Canada, Aug. 2018
- “*On Regularized Losses for Weakly-supervised CNN Segmentation*”
 - In Borealis AI, Toronto, Canada, July 2018
- “*Kernel Clustering, MRF and Convolutional Neural Networks for Image Segmentation*”
 - In Huawei Noah’s Ark Lab, Toronto, Canada, April 2018
- “*Kernel (Spectral) Clustering meets Markov Random Filed*”
 - In ETH Zürich, Zürich, Switzerland, Nov. 2017
- “*Energy minimization for segmentation in computer vision*”
 - In ETS Montreal, Université du Québec, Montreal, Canada, Nov. 2016
 - In A9.com, Palo Alto, CA, June 2016
- “*Normalized Cut Meets MRF*”
 - In *European Conference on Computer Vision (ECCV)*, Amsterdam, Netherlands, Oct. 2016
- “*Pseudo-Bound optimization for binary energies*”
 - In *European Conference on Computer Vision (ECCV)*, Zürich, Switzerland, Sept. 2014

AWARDS

- Doctoral Consortium Travel Award, CVPR 2019
- David R. Cheriton Graduate Scholarship, University of Waterloo, 2018-2019
- International Doctoral Student Award, University of Waterloo, 2018
- Western Graduate Research Scholarship, Western University, 2012-2017

- Outstanding Graduate, Huazhong University of Science and Technology, 2012
- National Scholarship, China, 2009

PROFESSIONAL SERVICES

- Reviewer for journals:
TIP, IJCV, CVIU, TPAMI
- Reviewer for conferences:
British Machine Vision Conference (BMVC) 2017, 2019
European Conference on Computer Vision (ECCV) 2016, 2018
IEEE International Conference on Computer Vision (ICCV) 2015, 2017, 2019
IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2015 – 2019

TEACHING EXPERIENCE

- Teaching Assistant, CS 484/684: Computational Vision, Fall 2018, University of Waterloo
- Teaching Assistant, CS 115: Introduction to Computer Science Winter 2018, University of Waterloo
- Teaching Assistant, CS 1037a: CS Fundamentals II (C++) Fall 2012-2016, CS 1027b: CS Fundamentals II (JAVA) Spring 2016-2017, Western University