# Boyu Wang

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### Education

2014 - current **PhD student, Computer Science**, Department of Computer Science, Stony Brook University, Stony Brook, NY, Advisor: Minh Hoai Nguyen. GPA:3.95/4.00

2010 - 2014 **B.S., Computer Science**, Department of Strengthened Cultivation , Nanjing University of Posts and Telecommunications (NUPT), Nanjing, China. GPA:3.71/4.00

Jan. 2013 - Exchange Student, University Semester Abroad Program, Specialized in Computer May. 2013 Science, California State University, Fullerton (CSUF), CA, USA.

#### Research Interests

Computer Vision; Deep Learning; Action Prediction; Action Early Recognition; Video Understanding; Crowd Counting.

## Experiences

Summer 2020 Software Engineer Intern, Google Research, Google.

 $\bullet~$  Video segment classification and entity localization.

Summer 2019 Software Engineer Intern, Google Ads, Google.

- Product segmentation in image ads.
- Button color suggestion for image ads.

Summer 2017 **Research Intern**, Deep Learning and Computer Vision Group, Intelligence Innovation (In2) Lab, Samsung Research America.

• Realtime speech activity detection for lip reading.

2015 - current **Research Assistant**, Computer Vision Laboratory, Computer Science Department, Stony Brook University.

- Action early recognition and prediction.
- Image scene understanding and crowd counting.
- Xray scattering image classification and generation.
- 2014 2015 **Teaching Assistant**, Computer Science Department, Stony Brook University, CSE 527 Computer Vision (Graduate Course), CSE 214 Data Structures, CSE 114 Procedural and object-oriented programming.

#### Publication

Distribution Matching for Crowd Counting. Boyu Wang\*, Huidong Liu\*, Dimitris Samaras and Minh Hoai. In Advances in Neural Information Processing Systems (NeurIPS) 2020, (Spotlight).

Uncertainty Estimation and Sample Selection for Crowd Counting. Viresh Ranjan, Boyu Wang, Mubarak Shah and Minh Hoai. In Proceedings of the Asian Conference on Computer Vision (ACCV) 2020.

Active Vision for Early Recognition of Human Actions. Boyu Wang, Lihan Huang and Minh Hoai. In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2020.

Sequence-to-Segment Networks for Segment Detection. Zijun Wei\*, Boyu Wang\*, Minh Hoai, Jianming Zhang, Xiaohui Shen, Zhe Lin, Radomir Mech and Dimitris Samaras. In IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI) 2019.

Are You Speaking: Real-Time Speech Activity Detection via Landmark Pooling Network. *Boyu Wang* and Xiaolong Wang. In Proceedings of the IEEE Conference on Automatic Face and Gesture Recognition (FG) 2019.

Sequence-to-Segment Networks for Segment Detection. Zijun Wei, Boyu Wang, Minh Hoai, Jianming Zhang, Xiaohui Shen, Zhe Lin, Radomir Mech and Dimitris Samaras. In Advances in Neural Information Processing Systems (NeurIPS) 2018.

Back to the Beginning: Starting Point Detection for Early Recognition of Ongoing Human Actions. Boyu Wang and Minh Hoai. In Computer Vision and Image Understanding (CVIU) 2018.

Predicting Body Movement and Recognizing Actions: an Integrated Framework for Mutual Benefits. Boyu Wang and Minh Hoai. In Proceedings of the IEEE Conference on Automatic Face and Gesture Recognition (FG) 2018.

X-ray Scattering Image Classification Using Deep Learning. Boyu Wang, Kevin Yager, Dantong Yu, and Minh Hoai. In Proceedings of the IEEE Winter Conference on Applications of Computer Vision (WACV) 2017.

#### Professional services

Reviewer: NeurIPS 2020, CVPR 2020, ECCV 2020, AAAI 2020, ICCV2019, CVPR 2019, ECCV 2018, ICVGIP 2018, ICVGIP 2017, SSDBM 2017

#### Skills

Extensive experience with: Python, Matlab, C++ Project experience with: PyTorch, Tensorflow

#### Selected Awards

- 2016 Grace Hopper Celebration Scholarship.
- 2014 Special CS Department Chair Fellowship, Stony Brook University.
- 2013 The National Undergraduate Mathematical Contest in Modeling, The Second Prize, China.