

Zhuoran Yu

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Education

Georgia Institute of Technology

MASTER OF SCIENCE IN COMPUTER SCIENCE

- GPA: 4.0/4.0

Atlanta, GA

Aug 2018 - Aug 2020

University of Waterloo

BACHELOR OF MATHEMATICS IN COMPUTER SCIENCE AND APPLIED MATHEMATICS

- Graduate with Distinction, Dean's Honours List
- Arthur Beaumont Memorial Scholarship

Waterloo, Canada

Jan 2014 - June 2018

Skills

Languages Python, Java, C/C++, Matlab

Frameworks Pytorch, Numpy, Pandas, Scikit-Learn

Skills Computer Vision, Deep Learning, Semi-Supervised Learning, Object Detection

Experience

Sensetime

RESEARCH INTERN

Shenzhen, China

May, 2019 - Dec, 2019

- **Object-detection based product SenseKitchen:** replacing previous Two-Stage detectors by One-Stage detectors for acceleration. Achieving 5 times faster real-time inference speed without sacrificing performance.
- **Cutting-edge research on scale variance in object detection and image classification:** Analyzed unexpected behavior of batch normalization and proposed refined design of batch normalization in response to scale variance.

Georgia Institute of Technology

GRADUATE TEACHING ASSISTANT

Atlanta, GA

Jan. 2020 - Aug. 2020

- Conducted teaching assistantship in the course CS 7643 *Deep Learning* taught in collaboration with FAIR
- Develop assignments for the OMCS version of CS 7643 *Deep Learning*

University of Waterloo

UNDERGRADUATE RESEARCH ASSISTANT

Waterloo, ON

May, 2017 - Dec, 2017

- Implemented two streaming partitioning algorithms: LGD and Fennel and conducted experiments to evaluate these algorithms in response to different types of queries.

Publications

Scale Calibrated Training: Improving Generalization of Deep Networks via Scale-Specific Normalization

- Zhuoran Yu, Aojun Zhou, Yukun Ma, Yudian Li, Xiaohan Zhang, Ping Luo
- arxiv preprint

Scale-Equalizing Pyramid Convolution for Object Detection

- Xinjiang Wang*, Shilong Zhang*, Zhuoran Yu, Litong Feng, Wei Zhang
- Conference on Computer Vision and Pattern Recognition(CVPR), Seattle, WA, 2020

PIClean: A Probabilistic and Interactive Data Cleaning System

- Zhuoran Yu, Xu Chu
- ACM SIGMOD Demo Track, Amsterdam, the Netherlands, 2019

Project

Semi-Supervised Object Detection via Cross-Scale Consistency

- Applying consistency loss cross scales on feature pyramid with unlabeled data
- Using top-k selection criterion to filter out background anchors before applying consistency loss