

# Yichen Zhang

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Github: <https://github.com/EthanZhangYC>

## EDUCATION

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- Xiamen University** 09/2016-07/2020  
B.E. Cognitive Science and Technology, Department of Artificial Intelligence, School of Informatics  
➤ GPA(Major): 3.78(3.83) / 4.0 ; Ranking: 1 / 32
- National University of Singapore** 08/2020-present  
M.S. Artificial Intelligence, School of Computing  
➤ Current CAP: 4.5 / 5.0  
➤ Taken module: Neural Network and Deep Learning, Uncertainty Modeling in AI, AI Planning and Decision Making  
➤ Taking module: Neural Network and Deep Learning II, 3D Computer Vision, Advance Topic in AI

## PUBLICATIONS

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- ✧ Mingbao Lin, Rongrong Ji, Yan Wang, **Yichen Zhang**, Baochang Zhang, Yonghong Tian, Ling Shao. HRank: Filter Pruning using High-Rank Feature Map. Computer Vision and Pattern Recognition(CVPR) 2020 Oral.
- ✧ Jiao Xie, Shaohui Lin, **Yichen Zhang**, Linkai Luo. Training Convolutional Neural Networks with Cheap Convolutions and Online Distillation. Submitted.

## RESEARCH EXPERIENCES

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- Master Thesis** 01/2021-present  
Supervisor: Dr. Ying Zhang, Prof. Roger Zimmermann, NUS  
➤ Title: Discovering Cross-Domain Patterns for Cervical Cancer Images
- Undergraduate Thesis** 02/2020-06/2020  
Supervisor: Dr. Mingbao Lin, Prof. Rongrong Ji, Xiamen University  
➤ Title: Meta Learning and Knowledge Distillation Based Network Pruning.  
➤ Use knowledge distillation to instruct the training of meta network and thus generate better predicted pruned network.  
➤ Outcome: undergraduate thesis.
- Network Pruning** 08/2019-11/2019  
Supervisor: Dr. Mingbao Lin, Prof. Rongrong Ji, Xiamen University  
➤ Found that filter with a large rank contained more information, and utilized this character to prune neural networks, surpassing many other state-of-the-art methods on the performance of the pruned model.  
➤ Outcome: 1 paper accepted by CVPR 2020.
- Knowledge Distillation and Compact Structures of Neural Networks** 05/2019-08/2019  
Supervisor: Dr. Shaohui Lin, Prof. Rongrong Ji, Xiamen University  
➤ Conducted knowledge distillation with network ensemble on the basis of Shift-Net structure.  
➤ Outcome: 1 paper submitted.
- Basis and Quantization (Neural Network Compression)** 05/2018-12/2018  
Supervisor: Dr. Shaohui Lin, Prof. Rongrong Ji, Xiamen University  
➤ Conducted compression experiments on large CNN models and LSTM model.  
➤ Outcome: 1 Proposal approved by the Neural Network Compression Group by the 67<sup>th</sup> AVS Conference Committee.

## PROJECT EXPERIENCES

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- ✧ Time Lotus Tunnel 06/2018-12/2018
- ✧ Visual Indoor Positioning System Based on TensorFlow 12/2018-06/2019

## HONORS AND AWARDS

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- ✧ Third Prize of Xiamen University Trials in the 2020 KPMG Ideation Challenge League (2019)
- ✧ First Prize of Academic Excellence Scholarship (2019&2017)
- ✧ Dean's Honors List (2018&2019)
- ✧ Merit Student of Xiamen University (2018&2019)
- ✧ Zhongxian Huang Fellowship (2018)
- ✧ Third Prize of Group Programming Ladder Tournament (2018)
- ✧ First Prize of Undergraduate Group in Fujian Division of China Mathematical Contest in Modeling (2018)

## EXTRACURRICULAR ACTIVITIES

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- Office manager*, Maker Association, Xiamen University 04/2017-06/2018  
*Secretary*, Youth Volunteer Association of Xiamen University 10/2016-10/2017  
*Secretary*, Student Union, School of Information Science & Technology, Xiamen University 10/2016-10/2017