

# Hu Qinghao

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## EDUCATION

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<b>Nanyang Technological University, Singapore</b> <i>Ph.D. student in Computer Science</i> Supervisor: Prof. Zhang Tianwei and Prof. Wen Yonggang	<i>Aug. 2020 - Now</i> <i>GPA: 4.7 / 5.0</i>
<b>National University of Singapore, Singapore</b> <i>Master in Electrical Engineering</i>	<i>Jan. 2019 - Dec. 2019</i> <i>GPA: 4.7 / 5.0</i>
<b>Zhejiang University, China</b> <i>Bachelor in Electrical Engineering</i>	<i>Sept. 2014 - June. 2018</i> <i>GPA: 3.6 / 4.0</i>

## RESEARCH INTERESTS

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- Cluster Resource Management and Scheduling
- Automated Deep Learning
- Machine Learning Interpretability

## PUBLICATIONS

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**Primo: Practical Learning-Augmented Systems with Interpretable Models**  
Qinghao Hu, Harsha Nori, Peng Sun, Yonggang Wen, Tianwei Zhang  
[ATC '22] USENIX Annual Technical Conference

**Characterization and Prediction of Deep Learning Workloads in Large-Scale GPU Datacenters**  
Qinghao Hu, Peng Sun, Shengen Yan, Yonggang Wen, Tianwei Zhang  
[SC '21] International Conference for High Performance Computing, Networking, Storage, and Analysis

## PROJECT EXPERIENCES

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**Designing Efficient Scheduling Algorithms for Deep Learning** *Sept. 2020 - Present*  
*NTU Research Project*  
Aim to develop an efficient GPU cluster scheduler tailored for distributed deep learning (DL) training jobs, which efficiently schedules training jobs to improve cluster utilization, support research groups with different ecosystems, and reduce job completion time

**Neural Network Based Nanoscale Devices Modeling** *Feb. 2019 - Dec. 2019*  
*NUS Research Project*  
Developed a novel neural network based compact model of carbon nanotube transistors for simulation and built a inverse design system for physical parameters prediction, mainly using bayesian regularization.

## AWARDS / HONORS

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Zhejiang University Outstanding College Graduates	2018
Best Undergraduate Thesis Award of ISEE College	2018
“TI CUP” Electronic Design Competition The Second Prize	2017
The National Talent Training Base The Third Prize Scholarship	2016
Outstanding Students The Second-Class Scholarship	2015
Zhejiang Physics Innovation Competition The Third Prize	2015