# JIAJUN LI

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Institute of Computing Technology, Chinese Academy of Sciences No.6 Kexueyuan South Road Zhongguancun, Haidian District Beijing, China

#### **EDUCATION**

# University of Chinese Academy of Sciences

Aug. 2016 - Present

Ph.D. student in Institute of Computing Technology, Chinese Academy of Sciences under supervision of Professor Yinhe Han and Professor Xiaowei Li

## China University of Geosciences (Wuhan)

Aug. 2012 - Jun. 2016

Talent Program of Li Siguang (30/4000+), GPA: 4.05, Rank: 2/44

## SELECTED PROJECTS

## Ultra Low-Power Neural Accelerators of Keyword Spotting

Sep. 2017 - Present

- Research a method to effectively train binarized neural networks for the specialized low-precision neural accelerators.
- First authored and published a paper in ASP-DAC'19.

#### Robo-Advisor of Investment

Mar. 2016 - Aug. 2017

• Based on A-SHARE, research and develop a core algorithm for a platform of robo-advisor of investment.

## Low-Power Image Recognition Challenge 2016

Aug. 2015 - Jun. 2016

- Survey how to use Convolutional Neural Networks to hypothesize object location and categorization from images in mobile heterogeneous SoCs.
- Won first prize in Track 1, second prize in Track 1, first prize in Track 3.
- Co-authored a paper in ASP-DAC'17.

## Algorithm of wheeled robot motion planning

Mar. 2014 - Nov. 2014

- Research and develop a algorithm of wheeled robot motion planning based on the simulation platform of FIRA SimuroSot 5:5.
- Won two international awards and a national award.

## Higher Education Teaching Research Project of Hubei Province

Sep. 2013 - Dec. 2013

- Study a method for judging the convergence and divergence of series.
- First authored and published A Method of Testing the Convergence of Series. in Studies in College Mathematics.

## **PUBLICATIONS**

Cong Shi, **Jiajun Li**, Ying Wang, and Gang Luo. Exploiting Lightweight Statistical Learning for Event-Based Vision Processing. *In IEEE Acess*, 2018.

**Jiajun Li**, Ying Wang, Bosheng Liu, Yinhe Han, and Xiaowei Li. Simulate-the-hardware: Training Accurate Binarized Neural Networks for Low-Precision Neural Accelerators. *In IEEE/ACM Proceedings of 24th Asia and South Pacific Design Automation Conference* (ASP-DAC'19).

Bosheng Liu, Xiaoming Chen, **Jiajun Li**, and Yinhe Han. Addressing the Issue of Processing Element Under-Utilization in General-Purpose Systolic Deep Learning Accelerators. *In IEEE/ACM Proceedings of 24th Asia and South Pacific Design Automation Conference* (ASP-DAC'19). **Jiajun Li**, Ying Wang, Yinhe Han, and Xiaowei Li. Training Effective Binarized Neural Networks for Intelligent Edge Devices Neural Network Accelerator. *In Proceedings of Chinese Testing Conference* (CTC'18).

Ying Wang, Zhenyu Quan, **Jiajun Li**, Yinhe Han, Huawei Li, and Xiaowei Li. A Retrospective Evaluation of Energy-Efficient Object Detection Solutions for Embedded Devices. *In IEEE/ACM Proceedings of 2018 Design, Automation and Test in Europe conference* (DATE'18).

Cheng Wang, Ying Wang, Yinhe Han, Lili Song, Zhenyu Quan, **Jiajun Li**, and Xiaowei Li. CNN-based object detection solutions for embedded heterogeneous multi-core SoCs. *In IEEE/ACM Proceedings of 22nd Asia and South Pacific Design Automation Conference* (ASP-DAC'17).

#### **LEADERSHIP**

Co-President of Students' Career Development Association of ICT Institute of Computing Technology, Chinese Academy of Sciences Planning and arranging more than 10 meetings and conferences.	Aug. 2017 - Sep. 2018
Co-President of Graduate Badminton Association University of Chinese Academy of Sciences Founding and Leading one of the largest clubs on campus.	Sep. 2016 - Jun. 2017
Team Leader of Student's Platform for Innovation and Entrepreneurs  Ministry of Education of the People's Republic of China  Satellite data and ground data fusion for detection of PM2.5.	May. 2014 - Apr. 2016
SELECTED HONORS & AWARDS	
Merit Student of Chinese Academy of Sciences (for three consecutive years)  University of Chinese Academy of Sciences	Jul. 2017 - Jun. 2019
Outstanding B.E. Degree Thesis of Hubei Province, China Hubei Provincial Department of Education	Jan. 2017
Chinese Academy of Sciences Scholarship  Ministry of Education of the People's Republic of China and Chinese Academy of Science	Dec. 2016
Low-Power Image Recognition Challenge 2016 (1st Place) $IEEE\ Rebooting\ Computing$	May. 2016
National Scholarship  Ministry of Education of the People's Republic of China	Nov. 2014
19th FIRA RoboWorld Cup 2014 (2nd Place) the Federation of International Robot-soccer Association	Nov. 2014
Academician Scholarship China University of Geosciences (Wuhan)	Dec. 2013
Badminton Championship of Capital Universities (2nd Place) Federation of University Sports of Beijing	Apr. 2017

## **SKILLS**

Program Language Python, Verilog, Shell, JAVA, Objective-C, C++, VB Software Tools Caffe, Tensorflow, Pythorch, Node.js

Design Software Vim, VSCode, OmniGraffle, Plot2X, PyCharm, XCode, Eclipes