Tinghuan Chen

Ph.D student
Rm 905, Ho Sin Hang Engineering Building
The Chinese University of Hong Kong
`thchen@cse.cuhk.edu.hk`

Research Interest

Regression, Classification, High-level Synthesis, Cyber-Physical Systems, Transform Code, Compressed Sensing and Machine Learning

Education

- **The Chinese University of Hong Kong**   Hong Kong
  2017 – now

  – Ph.D student
  – Department of Computer Science and Engineering

- **Southeast University**   Nanjing, China
  2014 – 2017

  – M.Eng., Circuits & Systems
  – National ASIC Engineering Technology Research Center
  – School of Electronics Science & Engineering

- **Southeast University**   Nanjing, China
  2011 – 2014

  – B.Eng. Electronics Science & Technology
  – School of Electronics Science & Engineering

- **Southeast University**   Nanjing, China
  2010 – 2011

  – Computer Science & Technology
  – School of Computer Science & Engineering

Publications

(1) Qi Sun, **Tinghuan Chen**, Jin Miao, Bei Yu, "Power-Driven DNN Dataflow Optimization on FPGA". **IEEE/ACM International Conference on Computer-Aided Design (ICCAD)**, Westminster, CO, Nov. 4–7, 2019. (Invited Paper)

(2) **Tinghuan Chen**, Bingqing Lin, Hao Geng and Bei Yu. "Sensor Drift Calibration via Spatial Correlation Model in Smart Building". **ACM/IEEE Design Automation Conference (DAC)**, Las Vegas, NV, June 2-6, 2019.

(3) Qianru Zhang, Meng Zhang, **Tinghuan Chen**, Zhifei Sun, Yuzhe Ma and Bei Yu. "Recent advances in convolutional neural network acceleration". **Neurocomputing**, vol. 323, pp. 37-51, 2019.

(4) Qianru Zhang, Meng Zhang, **Tinghuan Chen**, Jinan Fan, Zhou Yang and Guoqing Li. "Electricity Theft Detection Using Generative Models". **IEEE International Conference on Tools with Artificial Intelligence (ICTAI)**, Volos, Nov. 5-7, 2018.

(5) Zhifei Sun, **Tinghuan Chen**, You Tong and Meng Zhang. "Blind Equalization of Constant Modulus Signals Based on Gaussian Process for Classification". **Wireless Personal Communications**. vol. 97, no. 4, pp. 6005-6018, 2017.

(6) Chen Zhu, Huatao Zhao, **Tinghuan Chen** and Tianbo Zhu. "A low latency and high efficient three-dimension Network-on-Chip based on hierarchical structure". **Modern Physics Letters B**. vol. 31, no. 19-21, 1740061, 2017.

(7) **Tinghuan Chen**, Meng Zhang, Jianhui Wu, Chau Yuen and You Tong. "Image Encryption and Compression based on Kronecker Compressed Sensing and Elementary Automata Scrambling". **Optics & Laser Technology**, vol. 84, pp. 118-133, 2016.

(8) Meng Zhang, **Tinghuan Chen**, Xuchao Shi and Peng Cao. "Image Arbitrary Ratio Down- and Up-Sampling Scheme Exploiting DCT Low Frequency Components and Sparsity in High Frequency Components". **IEICE Transactions on Information and Systems**. vol. E99-D, no. 2, pp. 475-487, 2016.

(9) **Tinghuan Chen**, Zhifang Dong. "A New Method for the 3-D Discrete Hartley Transform". **IEEE International Conference on Instrumentation & Measurement, Computer, Communication and Control**, Harbin, Dec. 8-10, 2012.

Awards

- **Chinese University of Hong Kong Postgraduate Scholarship**   Aug. 2017

- **Postgraduate National Scholarship of China**   Nov. 2016

- **Nan Rui Electric Scholarship**   Jun. 2016

- **Master Student First Class Academic Scholarship**   Nov. 2014

- **Southeast University Outstanding Thesis** (6/187)   Jun. 2014

- **Honorable Mention of Mathematical Contest in Modeling**   May. 2013

- **National Students Innovative Training Program** (Grade: Outstanding)   Oct. 2013

- **National Endeavor Scholarship**   Nov. 2012

Intern

- **Research Assistant**   Duke Kunshan University
  July. 2017-Sep.2017
  - Instructor: Xin Li

- **Research Assistant**   The Chinese University of Hong Kong
  Mar. 2017-May. 2017
  - the Department of Computer Science and Engineering
  - Instructor: Bei Yu

Professional Skill

- **Hardware:** Verilog HDL, High-level Synthesis.

- **Software:** MATLAB, C++, Python, C, Tcl.