DONGNING MA

800 E. Lancaster Ave, Villanova, PA 19085

dma2@villanova.edu

EDUCATION

Villanova University, PA *Januarary 2019 - Present*
Doctor of Philosophy Student in Computer Engineering
Department of Electrical and Computer Engineering

University of Science and Technology Beijing, China *September 2014 - June 2018*
Bachelor of Engineering in Automation
School of Advanced Engineering

RESEARCH FOCUS

- Energy-efficient and sustainable software/hardware co-design and testing

- Approximate computing, application and implementation

- Embedded systems, IoT and edge computing

ACADEMIC RECORDS

Journals

1. Dongning Ma, Xun Jiao, WoMA: An Input-Based Learning Model to Predict Dynamic Workload of Embedded Applications, Embedded Systems Letters, 2019

Conferences

1. Dongning Ma, Xun Jiao, An Input-aware Learning-based Error Model of Voltage-Scaled Functional Units. The 16th IEEE Workshop on Silicon Errors in Logic System Effects (SELSE), Standford, CA, 2020. (Accepted)

2. Dongning Ma, Siyu Shen, Xun Jiao, Work-in-Progress: DeVos: A Learning-based Delay Model of Voltage-Scaled Circuits. International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), New York, USA, 2019.

3. Dongning Ma, Xun Jiao, Detecting and Bypassing Trivial Computations in Convolutional Neural Networks, IEEE/ACM International Symposium on Nanoscale Architectures (NANOARCH), 2019

4. Dongning Ma, Xun Jiao, Energy Efficient GPU Applications Through Computation Skip. in Proc. IEEE International Conference on Embedded Software and Systems (ICESS), Las Vegas, USA, 2019.

AWARDS AND HONORS

- Embedded System Week 2019 (ESWEEK'19) ACM SIGBED Student Research Competition - Student Travel Grant ($500) (Microsoft)

- 10th International Green and Sustainable Computing Conference (IGSC 2019) Student Travel Grant ($1000) (NSF)

OTHER ACTIVITIES

Teaching

- Teaching Assistant for ECE 2431 - Embedded Systems I Lab (Spring 2019) at Villanova University

- Teaching Assistant for ECE 5400 - Applied Machine Learning (Fall 2019) at Villanova Unviersity

- Teaching Assistant for ECE 5450 - Microcontrollers & Applications (Fall 2019) at Villanova Unviersity

Professional Services

- Reviewer for IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)

Memberships

- Institute of Electrical and Electronics Engineers (IEEE), Student Member, 2019 - Present

- Association for Computing Machinery (ACM), Student Member, 2019 - Present

Last Update: 2019.11.20