DONG JI

Address: No.195, Chuangxin Road, Hunnan District, Shenyang, Liaoning, China, 116024
Birthdate: 30/03/1989 Gender: Male Nationality: Chinese
Phone: (+ 86) 15524267158 Email: jidong893@gmail.com

EDUCATION BACKGROUND

Northeastern University **Shenyang, China**
Ph.D. in Computer Science (Supervisor: Prof. Wang Yi) Sept. 2014 - July 2018 (expected)
Joint with BMW-Brilliance Automotive Ltd.

Northeastern University **Shenyang, China**
M.E. in Computer Science Sept. 2012 - July 2014
GPA: 3.60 / 4.00; Ranked: 20 / 80

Shenyang University of Technology **Shenyang, China**
B.E. in Electronic and Information Engineering Sept. 2008 - July 2012
GPA: 3.62 / 4.00; Ranked: 7 / 130

ACADEMIC EXPERIENCE

Solar Energy in Electric Vehicle Ecosystem (Ph.D. Topic) **Mar. 2014 - Present**
Leading developer

· Project Description: Introducing solar energy to electric vehicle ecosystem, both in charging infrastructure and on electric vehicles. Detailed topics:
- A Simulation Platform for EV Charging system with Solar Energy (SPECS) (completed)
- Solar-powered EV trip planning and navigation (e-Energy 2016)
- Dynamic reconfiguration of solar panel array to improve energy harvesting performance (in progress)
- Optimizing cost for solar charging stations (in progress)
- Smart city-wise location of solar-powered charging stations (in progress)

The Estimation of Pulse Transit Time (PTT) **June. 2013 - Mar. 2014**
System integration

· Project Description: This project developed a new system to continuously measure blood pressure based on the principle proposed by Lansdown, that the pulse wave transit time shows a linear correlation with arterial blood pressure within a certain range. We first detect the subjects ECG and pulse wave signal to calculate the PTT (pulse transit time), based on which the blood pressure can be computed efficiently.

Out-of-Order Pipeline Modeling and Analysis in Real-Time Systems **Apr. 2013 - June. 2013**
Main technique developer

· Project Description: For real-time systems, in order to support schedulability analysis, it is crucial to estimate the Worst-Case Execution Time (WCET) of a program. WCET analysis typically models the timing effects of mirco-architectural features in modern processors (such as pipeline, cache, branch prediction) to obtain safe and tight estimates. In this work, we mainly used constraint solving to model the behavior of an out-of-order super-scalar pipeline, which can then be used to computer the WCET of a program.

PUBLICATIONS

[1] **Dong Ji**, Cai Zhang, Ye Ma, Nan Guan, Automatic Photovoltaic Array Reconguration for Fault Detection. (Submit to International Journal of Photoenergy)

[2] Mingsong Lv, Nan Guan, Ye Ma, **Dong Ji**, Erwin Knippel, Xue Liu, Wang Yi, Speed Planning for Solar-Powered Electric Vehicles.International Conference on Future Energy Systems ACM, 2016.

[3] Hao Lin, Wenyao Xu, Nan Guan, **Dong Ji**, Yangjie Wei, Wang Yi, Noninvasive and Continuous Blood Pressure Monitoring Using Wearable Body Sensor Networks. Intelligent Systems, IEEE, 2015, 30(6):38-48.

PERSONAL SKILLS

Programming Languages

- C; Matlab; Python;

EDA Tools

- IAR Systems; Altium DXP / Protel;Multisium

Hardware development Experiences

- ARM7TDMI; Microcontroller MSP430; C51;

AWARDS

Northeastern University Scholarship (2 times)	2013 - 2014
Northeastern University Merit Student (3 times)	2013 - 2014
Shenyang University of Scholarship (3 times)	2009 - 2012
Shenyang University of Technology Merit Student (3 times)	2009 - 2011
Honorable Mention in Liaoning University of Yin Xintong Low-carbon environment Contest	2010

REFERENCES PERSONS

- Prof. Wang Yi, Uppsala University, Sweden. Contact: yi@it.uu.se
- Mr. Frank Przywecki, BMW-Brilliance Automotive, China. Contact: Frank.Przywecki@bmw-brilliance.cn
- Prof. Mingsong Lv , Northeastern University, China. Contact: lumingsong@cse.neu.edu.cn
- Prof. Nan Guan, The Hong Kong Polytechnic University, China. Contact: csguannan@comp.polyu.edu.hk