Wen-Huang Lin

Paul-Grasse-Str. 29, 10409 Berlin, Germany ben.wenhuang.lin@gmail.com +49 176 3688 1306

Interests and Capabilities Embedded Software Development, Wireless and Optical Communication Object-Oriented Software Design, FPGA Development

Education

Karlsruhe Institute of Technology (KIT)

2014 - 2015

Master of Science in Electrical Engineering and Information Technology Karlsruhe, Germany – Grade: 2.0/5.0 (5-point German grading system, 1 being the best.)

Politecnico di Torino (PdT)

2013 - 2014

Master of Science in Electrical Engineering and Information Technology Turin, Italy

- Grade: 28.3/30.0

National Taiwan University (NTU)

2008 - 2012

Bachelor of Science in Electrical Engineering

Taipei, Taiwan

- Grade: 3.3/4.0

Selected Course Works FPGA Programming, Integrated Systems of Signal Processing, Statistical Signal Processing and Multimedia, Digital Communication, Wireless and Optical Communication, Network Modelling, Wireless and Mobile Network, Computer Network,

System Programming, Data Structures, Algorithms, System and Software Engineering

Research Experiences

Master Thesis Student

Mar 2015 - Oct 2015

Forschungszentrum Informatik (FZI)

Karlsruhe, Germany

- Topic: Safe Processing on Embedded Heterogeneous Automotive Processing Platforms.
- Developed two consistency checking processes for robustness ranging from hardware design to OS level programming without sacrificing processing performance of processors and hardware accelerators.

Research Assistant

Sep 2014 - Mar 2015

Department of Dependable Nano Computing, KIT

Karlsruhe, Germany

- Topic: Developed Evaluation Tool for Multiple Transient Error Events Vulnerability.
- C⁺⁺: Developed the mechanism to calculate the vulnerability for each flip-flop.

Selected Course Projects

Logical Topology Design in Optical Network, PdT

Jun 2014 - Jul 2014

- C⁺⁺: Implemented the Increasing Multi-hop Logical Topology Design Algorithm.
- Optimised and edited some steps in this heuristic algorithm in a more efficient way.

Wireless and Mobile Network, NTU

Summer 2012

- Topic: Network Performance Improvement by Compressing Method.
- NS2: Developed a method and modified NS2 802.11 protocol and energy model.
- Simulated this data transmission mechanism and analysed the efficiency on different network topologies.

Networking and Multimedia Lab, NTU

Feb 2012 - Jul 2012

- Java: Created a Chat Room like Messenger (socket programming, real-time video streaming, file transmission).
- Created an Android Apps bumper game (supporting multiplayers using 802.11 WLAN).

Digital Circuit Design Lab, NTU

Summer 2010

- Implemented RSA-256 bits decoder (required to meet FPGA board specification constraints).
- Designed DJ Smart Effect Disk on FPGA board (using magnets to detect plate motion).

Languages

Mandarin (Native Speaker), English (Proficiency), German (Intermediate)

Programming Skills C⁺⁺, VHDL, Java, Android, Matlab, GIT, Shell Scripting



Department of Computer Science Chair of Dependable Nano Computing

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2016-04-04



Letter of Recommendation for HiWi-Job ("student research assistant")

This is to confirm that **Mr. Wen-Huang Lin,** born 21st August 1990, worked as a student research assistant at KIT Karlsruhe Institute of Technology at the Chair of Dependable Nano Computing for **three month**, starting from 01st December 2014 to 28th February 2015.

During this period, he wrote a software program (in C++) to model the hardware behaviour in the presence of errors. He validated the behavior of this program using actual data provided by commercial simulators. The platform developed by Mr. Ling provided speedup of two orders of magnitudes compared to existing solutions.

Concerning Mr. Lin's technical skills, he has very comprehensive and mature programming skills. His ability to perform a fast evaluation of the selected approach in the early implementation phase was also quite interesting.

I wish him success in his future career.

Yours sincerely,

Prof. Dr. Mehdi Tahoori

M.Sc. Eng. Mojtaba Ebrahimi