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