

EDUCATION

COLLEGE OF ENGINEERING, **Boston University, MA.** [Sept., 2012–Sep.,2013(Expected)]

- **Degree:** Master in **Computer Engineering** [GPA:3.7 up to date]

Hochschule für Telekommunikation Leipzig, Germany [Mar., 2012–June, 2012]

- **Degree:** Bachelor dissertation (Major: **Informatics**) [2/5 point scale(1 best)]

Beijing University of Post and Telecommunications, China [Sep., 2008–July, 2012]

- **Degree:** Bachelor in **Electronic information Science and Technology** [81/100]
-

EXPERIENCE

3D PROJECTION MAPPING (October 2011– Mar 2012)

Intern at Beijing Dream Lighting City Culture Development Co., Ltd, China

- Assisted project documentation, inter-team communication. Dealing with bureaucracy.
-

PROJECTS

Peer to peer search on a cluster of Raspberry Pi for sensor data gathering(Ongoing)

- Designing distributed search based on distributed Hash table.
- Implementing sensors, network communication and web server on Raspberry Pi.

Motion detection by background/behavior subtraction (Nov 2012–Dec 2012)

- Designed a motion detection system based on Xilinx Spartan 3 FPGA, fed directly from a specific camera.
- Implemented camera control using I²C protocol.
- Optimized the originally floating point algorithm by substituting it with integer computation to fit the constraints of FPGA and avoid precision loose at the same time.
- Implemented HDMI/VGA display control.

Rock-crawler with Java SunSPOT device and sensors (Sep 2012–Dec 2012)

- Developed localization of the model car by reading radio signal strength from 3 other SunSPOTs with known coordinations, interpreting it to distance values, transmitting to PC base station where it is computed and visualized by Matlab. (Subproject)
- Developed a small wireless swarm network using 5 SunSPOTs each communicating with its master and follower. (Subproject)
- Developed the control of the car between PC and SunSPOT wirelessly, and between SunSPOT and servo.
- Implemented IR sensor, Ultrasonic sensor, light sensor and a wi-fi based webcam on the car.

Digital data transmitter based on Xilinx RocketIO transceiver with Virtex 5 FPGA (Mar 2012–May 2012)
(Idea courtesy Prof. Thomas, Schneider, Lab of high frequency, HfTL, Germany)

- Designed a high speed data transmitter/signal synthesizer, which is able to switch function between pre-configured data and pseudorandom signals generated by linear feedback shift register.
- Implemented the transmitter through RocketIO 3.75GHz level high speed transceiver, to generate test signal for an ultra-high resolution oscillator under development in the lab.

MetaTrader 4 forex platform automatic trading scripts(Spare time)

- Used C to write auto trading script with API from MT4 platform. Strategies used are RVI, fractals and MACD indicators.
-

SKILLS SET

Programming Languages and tools:

- I've been using a lot and thus know **C** (3years) and **Java**(1year) well.
- Fluent in Verilog and FPGA RTL Design (2.5years) and familiar with Matlab, HTML, CSS.
- Solid understanding of computer architecture, operating system, algorithms and data structure, CPU, memory hierarchy, MIPS assembly language and instruction set architecture.
- Been using **Github** for some time.

Operating System environment: Mac OS X, Arch Linux(1year), Windows

Theory: Internet structure, Digital logic, Unix, Embedded/RTOS system

Language Skills: English, Mandarin

COURSES

Currently pursuing:Advanced data structure,High Performance Programming with Multicore and GPUs, Introduction to Embedded Systems.

Completed(completed during Master Degree): Computer architecture, advanced digital design with Verilog and FPGA, networking the physical world(wireless sensor network).

Completed(during Undergraduate Degree):Algorithms and data structure, Embedded system, Computer Operating system, Computer organization & I/O, Digital logic, Digital signal processing, Computer network.

Codecademy.com:Python.

Coolux GmbH:3D projection mapping software basic training.
