# Yi LIU

High Performance Embedded Computing Lab
Beijing Institute of Technology
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## Education

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| 2011-Present | M.S. Candidate in Computer Science, **Beijing Institute of Technology**<br>Research focous: Computer Architecture Evaluation | Advisor: Weixing JI |
| 2007-2011 | B.S. in Computer Science, **Yanshan University**<br>*3<sup>rd</sup> University Scholarship*, 2009<br>GPA: 3.0/4 |

*3$^{rd}$ University Scholarship*, 2009

## Academia

Weixing Ji, **Yi Liu**, Yuanhong Huo, Yizhuo Wang, and Feng Shi: Extracting Threaded Traces in Simulation Environments [C]. 10th IFIP International Conference on Network and Parallel Computing (NPC 2013), Springer (EI indexed)

# Experience

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| *Current*<br>2013.4 | Yong Yang Tech Co.Ltd , Beijing<br>*LBE One-key Root Toolkit Samsung Special Verison* |

Yong Yang Tech Co.Ltd is the owner of **LBE Security** , a well known android security application.

LBE One-key Root Toolkit Samsung Special Version is their important product on PC, which helps normal user root their samsung device by several clicks. This toolkit is now on beta, and has 4,000 usage per day and up to 86% of all is success.(July, 2013)

I am the only developer and maintainer in this project and implements most part of the project.

- Android Superuser management and improvement (Linux system programming & Android app development)
- An automatic firmware root maker system.(Shell & Python)
- A specific website crawler (Python & Shell)
- refactor and extend original one-key root toolkit (QT & lua)

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| *Current*<br>Aug 2012 | Beijing Institute of Technology, Beijing<br>*Instruction Trace Simularity Computing Tool* |

- Developed and maintained trace similarity computing tool on Linux.
- Applied edit distantance approach to analysing program trace.
- Implemented multithread version using pthread

*Gem5 Based Multithreading Program Trace Collector*

- Did a research in depth on gem5 simulator and accomplished the task by myself.
- Modified and added extension for gem5 simulator to collect instruction trace of multithreading program running on it.

*Pin Based Hybrid Cache/SPM Performance Simulator*

- Developed a hybrid cache/spm simulator using pin as its backend.
- It can be configured by different spm size with l1, l2 level cache size to inspect optimal combination.

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| Mar-Aug 2012 | Internship at China Software Testing Center, Beijing<br>*Android Binder Communication Intercepting* |

- Applied Linux runtime library injection and function redirection techniques on Android platform using Linux C and ASM.
- Implemented intercepting Android binder IPC after a deep research on Android internal.

*Android Sms/Phonecall Filter Product Prototype*

| Mar-June 2011 | Yanshan University, Qinhuangdao |
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| | *Bachelor's graduation design* |

- Designed and developed a XMPP IM client in Java using Eclipse SWT Framework and Smack library.

## Languages

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| Chinese: | Native |
| English: | CET6 525/710 Good for reading and listening. |

## Development Skills

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| Programming Language: | C, Java, Python, Bash |
| Programming Tools: | Emacs, Eclipse |
| Development Platform: | Linux, Android |

## Interests and Activities

- Archlinux Wiki Chinese Translation Volunteer

- Reading, Blogging