

- Objective** **Linux Software Engineer, Shanghai**
- Education** **University of Science and Technology of China, Hefei, Anhui, P.R.C**
- School of Computer Science*
M.S. Candidate, Computer Software and Theory **expected Jul 2010**
- Department of Mathematics*
B.S., Information and Computing Science **Jul 2007**
- Department of Statics and Finance*
Dual Degree, Finance **Jul 2007**
- Experience** **USTC-Yale Joint Research Center for High-Confidence Software, USTC. *Research Assistant***
- Certifying Compiler for a C-like Programming Language* **Jul 2008 - Oct 2009**
Funded by National Natural Science Foundation of China
- When programming, programmers will write the corresponding program specifications to describe the behavior of the program. With our certifying compiler, the source codes and the specifications will be compiled into the executable file and the proof. Users use the proof checker to check the proof, and then indirectly check the reliability of the program. All that users have to trust is only the proof checker.
- Join in the back-end development, responsible for the conversion from AST to x86, the formal description of our abstract machine and the proof of the soundness of our system.
 - Designed and implemented the automatic proof generator of assembly - level in cooperation with others. Responsible for writing and debugging the general-purpose proof scripts for the x86 assembly instructions and successfully reduced the size of the generated proof by 10+ times.
- Automated Theorem Proving in Building High-confidence Software* **Jan 2009 - Aug 2009**
Funded by National Natural Science Foundation of China
- At present, the verification conditions(VC) are often proved by hand, while most of automatic theorem provers only report the result but do not support the generation of the machine - checkable proof. If the automated theorem proving could be applied in program verification and implemented the prover that can automatically solves the VC and generates the machine - checkable proof, it will greatly simplify the proving of VC and broaden the application of the high confidence software.
- Proposed an innovative method to manage the information about proving, including the proof segments and the records of proving actions, and then build the machine - checkable proof terms from the records; implemented all modules of the method.
 - Based on the improved Simplex algorithm and the above - mentioned method, designed and implemented an automated theorem prover for linear integer arithmetic, which outputs proof terms that can be checked by the proof assistant - Coq.
- Honors & Awards** **University of Science and Technology of China, Hefei, Anhui, P.R.C**
- Outstanding Student Scholarship (Bronze) **2005**
 - San Pu Scholarship **2004**
 - Outstanding New Student Scholarship (Bronze) **2003**
- Language & Technical Skills**
- CET-6. Good reading, writing and presentation skills in English;
 - Experienced with automated theorem proving and compiler;
 - Coding experience with functional programming (SML/OCaml), Coq, C and so on;
 - General knowledge about Linux, server and others.
- Self Evaluation**
- Conscientiously, absorbedly work in a planned and order way; emphasize details;
 - A quick learner to new ideas and new technologies;
 - Cooperate well with colleagues, and enjoy discussing and sharing of research ideas.