

# Liyuan Gao

## Temporary Residence

██████████  
Ithaca, NY 14853  
United States of America

## Permanent Residence

██████████  
Houston, TX 77096  
United States of America

(832) ██████████  
<http://phailed.me>  
[lg342@cornell.edu](mailto:lg342@cornell.edu)

## Academic Interests

Programming languages theory and advanced compiler techniques, reverse engineering, software security, large data/numerical analysis and optimization

## Education

- |           |  |
|-----------|--|
| 2010–2014 | Pursuing a B.Sc in Computer Science specializing in Programming Language Theory and Scientific Computing at the College of Engineering, Cornell University.<br>Cumulative GPA: <b>3.73</b> (major specific: 3.9), Previous Semester: 4.3 |
| 2006–2010 | Bellaire High School, Bellaire, TX.  |

## Work Experience

- |           |  |
|-----------|--|
| 2013      | Security Infrastructure Intern at Facebook   |
| 2010–2011 | Developer for <i>Fab@Home</i> , an Engineering project at Cornell hoping to develop a consumer 3D printer. |

## Relevant Courses

- |         |  |         |  |
|---------|--|---------|--|
| FA 2013 | CS 6113 – Language Security              | FA 2012 | CS 4210 – Numerical Analysis (diff eq) |
| FA 2013 | CS 6210 – Matrix Computations            | SP 2012 | CS 4820 – Analysis of Algorithms       |
| SP 2013 | CS 6110 – Advanced Programming Languages | SP 2012 | CS 3410 – Computer Organization        |
| SP 2013 | CS 4220 – Numerical Analysis             | SP 2012 | CS 3220 – Scientific Computing         |
| FA 2012 | CS 4410 – Operating Systems              | FA 2011 | CS 4120 – Compilers                    |
| FA 2012 | CS 4110 – Programming Languages          | SP 2011 | CS 3110 – Functional Programming       |

## Competitions

- |          |   |
|----------|---|
| Mar 2012 | Third Place at Facebook’s Camp Hackathon at Cornell University. We developed a $\LaTeX$ “mathbin” that supports handwriting recognition for mathematical expressions.           |
| Mar 2011 | First Place at Facebook’s Camp Hackathon at Cornell University. We developed a multiplatform audio note taking application.   |
| Oct 2010 | Third Place at Yahoo’s Hack Day at Cornell University. We developed an application that can syndicate information from multiple event services to generate an “Excuse Rolodex”. |
| Aug 2010 | Unplaced in the first biannual <i>JS1K</i> competition with an edit-in-place syntax highlighted editor for javascript.  |

**Programming Languages** Proficient in Python, Lua, C, Java, OCaml, Javascript, Matlab; Familiar with D, C++ and C#

**Technical Skills** I have experience debugging all kinds of applications; reading assembly listings; familiarity with the x86 ABI and coding conventions; experience with bytecode VMs of Java, Python, and Lua; have experience writing domain-specific languages and other code generating scripts; understanding compilers and automated code optimization; reverse engineering and manual decompilation; dissection of simple network traffic; familiarity of quirky floating point arithmetic; numerical solvers and optimization; web programming (jQuery, Django, raw CGI); I’m fairly good at approximating things; I know how to use Google.

**Applications**  $\LaTeX$ , IDA, Excel, Photoshop

**Websites** <http://www.github.com/leegao>, <http://luatut.com>, <http://phailed.me>