

# Titus Klinge

Iowa State University  
Computer Science Department  
226 Atanasoff Hall  
Ames, IA 50011

Phone: (515) 520-2309  
Email: tklinge@iastate.edu  
Homepage: [www.titusklinge.com](http://www.titusklinge.com)

## Education

- 2011-pres **Ph.D.** Computer Science  
Iowa State University  
Expected graduation: Spring 2016
- 2011 **B.S.** Computer Science  
Iowa State University

## Publications

- 2014 Ellis, S. J., Henderson, E. R., Klinge, T. H., Lathrop, J. I., Lutz, J. H., Lutz, R. R., Mathur, D., and Miner, A. S. (2014). Automated Requirements Analysis for a Molecular Watchdog Timer. In *Proceedings of the 29th ACM/IEEE International Conference on Automated Software Engineering ASE 2014*, pages 767–778. IFIP TC2 Manfred Paul Award for Excellence in Software: Theory and Practice
- 2012 Lutz, R. R., Lutz, J. H., Lathrop, J. I., Klinge, T. H., Mathur, D., Stull, D. M., Bergquist, T. G., and Henderson, E. R. (2012b). Requirements analysis for a product family of dna nanodevices. In *Proceedings of the Twentieth IEEE International Requirements Engineering Conference (RE 2012)*, pages 211–220
- Lutz, R., Lutz, J., Lathrop, J., Klinge, T., Henderson, E., Mathur, D., and Sheasha, D. A. (2012a). Engineering and verifying requirements for programmable self-assembling nanomachines. In *Proceedings of the Thirty-Fourth International Conference on Software Engineering (ICSE 2012)*, pages 1361–1364

## Professional Experience

- Iowa State University**, *Graduate Research Assistant* Aug 2011 – Present  
Responsible for the design of molecular algorithms and rigorous proofs of their correctness using mathematical analysis and automated tools
- Iowa State University**, *Prospective Student Coordinator* Aug 2011 – Dec 2013  
Met with prospective high school students to discuss Iowa State's Computer Science program

- IBM, *Extreme Blue Technical Intern*** *May 2010 – Aug 2010*  
 Responsible for development of a code execution profiler and static code analysis tools for PL/X (an IBM language) using Java; also wrote a language parser using JavaCC in support of the above tools
- Iowa State University, *Undergraduate Research Assistant*** *Jan 2010 – May 2010*  
 Implemented concurrent counterparts of OO design patterns and compared execution performance to sequential implementations in popular open source projects
- Institute for Transportation, *Student Programmer*** *May 2009 – May 2010*  
 Developed a data management application using Java, Oracle, and PL/SQL for Iowa DOT lab technicians

## Teaching Experience

- Iowa State University, *Graduate Teaching Assistant*** *Jan 2014 – May 2014*  
 Wrote assignments and exams, taught recitations, and graded for an undergraduate algorithms course
- Iowa State University, *Instructor of Record*** *Oct 2013 – Oct 2013*  
 Responsible for preparing curriculum and lecturing to students in a two-week discrete mathematics class
- Iowa State University, *Undergraduate Teaching Assistant*** *Aug 2010 – Dec 2010*  
 Taught recitations and graded written documentation, oral presentations and final group projects in an undergraduate advanced programming tools class
- Iowa State University, *Undergraduate Teaching Assistant*** *Jan 2009 – May 2009*  
 Responsible for facilitating student lab sessions and writing automated grading tools for an undergraduate introduction to object-oriented programming class

## Honors and Awards

2014	Iowa State Teaching Excellence Award
2012	Robert Stewart Early Research Recognition Award
2011	Winner of Iowa State Game Development Competition (1st Place)