

# Joseph Bebel

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CONTACT INFORMATION	Department of Computer Science University of Southern California Joseph Bebel c/o CS Department 941 Bloom Walk Los Angeles, CA 90089-0781 USA	<i>E-mail:</i> bebel at usc dot edu <i>WWW:</i> www.joebebel.com
RESEARCH INTERESTS	Theory of Computation, Classical and Quantum Computational Complexity, Complexity of Graph Isomorphism, Complex Analysis and Applications	
EDUCATION	<b>University of Southern California</b> , Los Angeles, California  Ph.D., Computer Science, In progress <ul style="list-style-type: none"><li>• Advisor: Professor Leonard Adleman</li><li>• Area of Study: Theoretical Computer Science</li></ul> M.S., Computer Science, May 2013  B.S., Electrical Engineering, May 2010. Graduated <i>Magna cum Laude</i>	
AWARDS AND FELLOWSHIPS	2014 Rockwell Dennis Hunt Scholastic Award, April 8, 2014 Best Poster for Visual Presentation, USC Computer Science Annual Research Review, March 6, 2014. Annenberg Graduate Fellowship, Aug. 2010 - May 2014 Rose Hills Foundation Undergraduate Research Fellowships, May 2007 - Aug. 2010	
UNPUBLISHED RESEARCH	Leonard Adleman, Dustin Reishus, <b>Joseph Bebel</b> , Henry Yuen, Rolfe Schmidt. Strata in Complex Analysis. Manuscript in preparation as of Aug. 2014.	
PUBLICATIONS	<b>Joseph Bebel</b> , Henry Yuen. Hard SAT instances based on factoring. A. Balint, A. Belov, M.J.H. Heule, and M. Jarvisalo (eds) 2013, Proceedings of SAT Competition 2013: Solver and Benchmark Descriptions. Department of Computer Science Series of Publications B, vol. B-2013-1, University of Helsinki.  <b>Joseph Bebel</b> , Benjamin L. Raskob, Alice C. Parker, Donald J. Bebel. Managing Complexity in an Autonomous Vehicle. IEEE Aerospace and Electronic Systems Magazine, vol. 23, no. 3, pp. 3-13, March 2008  <b>Joseph Bebel</b> , Benjamin L. Raskob, Alice C. Parker, Donald J. Bebel. Managing Complexity in an Autonomous Vehicle. In Proc. IEEE/ION Position Location and Navigation Symposium 2006  <b>Joseph Bebel</b> , Nathan Howard, Tej Patel. An Autonomous System Used in the DARPA Grand Challenge. In Proc. 7th International IEEE Conference on Intelligent Transportation Systems 2004	
TEACHING EXPERIENCE	<i>Teaching Assistant</i>	<b>September 2012 to Present</b> <ul style="list-style-type: none"><li>• CSCI 581: Logic and its Applications<ul style="list-style-type: none"><li>• Masters and Ph.D level mathematical logic, with Gödel Completeness and Incompleteness Theorems</li></ul></li></ul>

- CSCI 570: Analysis of Algorithms
  - Graduate level introduction algorithms course for CS Masters students and Ph.D students from other engineering fields
- CSCI 303: Analysis of Algorithms
- CSCI 270: Introduction to Algorithms and Theory of Computing
  - Undergraduate algorithms classes, covering algorithm design, NP-completeness, and undecidability

*Grader*

**August 2014 to Present**

- CSCI 476: Cryptography: Secure Communication and Computation

PROGRAMS AND  
ORGANIZATIONS

Annenberg Graduate Fellowship Program  
IEEE, Upsilon Pi Epsilon, Eta Kappa Nu, Tau Beta Pi  
W.V.T. Rusch Undergraduate Engineering Honors Program, Jan. 2006 - May 2010

CITIZENSHIP

USA