

## Christopher R. Aberger

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caberger@stanford.edu  
(608) 738-8876

<b>EDUCATION</b>	<b>Stanford University</b> , Stanford, California <i>Doctor of Philosophy</i> in Computer Science	<i>Expected 2018</i>
	<b>Stanford University</b> , Stanford, California <i>Master of Science</i> in Computer Science	<i>Summer 2016</i>
	<b>Stanford University</b> , Stanford, California <i>Master of Science</i> in Electrical Engineering	<i>Spring 2015</i>
	<b>University of Wisconsin</b> , Madison, Wisconsin <i>Bachelor of Science</i> in Computer Science <i>Bachelor of Science</i> in Computer Engineering <i>Minor</i> in Mathematics Graduated with Highest Distinction	<i>May 2013</i>
	<b>Zhejiang University</b> , Hangzhou, China Technical communication and Mandarin course	<i>Summer 2009</i>
<b>PUBLICATIONS</b>	<b>EmptyHeaded: A Relational Engine for Graph and RDF Processing</b> <i>Christopher R. Aberger, Andrew Lamb, Susan Tu, Andres Nötzli, Kunle Olukotun, and Christopher Ré</i> TODS	2017
	<b>Mind the Gap: Briding Multi-Domain Workloads with EmptyHeaded</b> <i>Christopher R. Aberger, Andrew Lamb, Kunle Olukotun, and Christopher Ré</i> VLDB Demo	2017
	<b>EmptyHeaded: A Relational Engine for Graph Processing</b> <i>Christopher R. Aberger, Susan Tu, Kunle Olukotun, and Christopher Ré</i> SIGMOD, <b>Best of</b>	2016
	<b>Old Techniques for New Join Algorithms: A Case Study in RDF Processing</b> <i>Christopher R. Aberger, Susan Tu, Kunle Olukotun, and Christopher Ré</i> ICDE Workshop	2016
	<b>Have Abstraction and Eat Performance, Too: Optimized Heterogeneous Computing with Parallel Patterns</b> <i>Kevin J. Brown, HyoukJoong Lee, Tiark Rompf, Arvind K. Sujeeth, Christopher De Sa, Christopher Aberger, and Kunle Olukotun</i> CGO	2016

**EXPERIENCE**     **Stanford University**, Palo Alto, California     *Fall 2013-Present*  
*Research Assistant* under Christopher Ré and Kunle Olukotun

**Google**, Mountain View, CA     *Spring 2017*  
*Software Engineering Intern*  
Materialized view query optimization in the F1 (massively distributed) database.

**Apple Inc.**, Austin, TX     *Summer 2013*  
*Design Performance Intern*  
Machine learning applied to performance analysis for A7 chip design.

**IBM**, Austin, TX     *Summer 2012*  
*Hardware Engineering Co-op*  
Functional verification and lab bring-up procedures for Power8 chip.

**Epic Systems**, Madison, WI     *Summer 2010, 2011*  
Finance Intern

**LANGUAGES**     C++, Python, Scala, Java, C

**SELECTED COURSES**     **University of Wisconsin-Madison**  
Advanced Computer Architecture I (Superscalar design) (ECE 752)  
Advanced Computer Architecture II (Multi-core design) (ECE 757)  
Digital Engineering Laboratory (ECE 554)  
Digital System Design and Synthesis (ECE 555)  
Digital Signal Processing (ECE 431)  
Operating Systems (CS 537)  
Computer Graphics (CS 559)  
Algorithms (CS 577)

**Stanford University**  
Databases (CS 145)  
Automata and Complexity Theory (CS 154)  
Logic (CS 157)  
Programming Languages (CS 242)  
Topics in Database Management Systems (CS 345)  
Program Analysis and Optimizations (CS 243)  
Advanced Topics in Operating Systems (CS 240)  
Machine Learning (CS 229)

**AWARDS**     *2008*, La Crosse Community Foundation Engineering Scholarship  
*2008-2012*, Wisconsin Academic Excellence Scholarship  
*2009, 2010*, Claude and Dora Richardson Engineering Scholarship  
*2010*, Polygon Excellence in Engineering Scholarship  
*2010-2011*, International Engineering Consortium Everitt Award Winner  
*2011-2012*, Tau Beta Pi National Scholar  
*2012*, Fred W. and Josephine H. Colbeck Scholarship Award