

Vijay Chidambaram

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Education	PhD in Computer Science, University of Wisconsin Madison <i>Advisors:</i> Prof. Andrea C. Arpaci-Dusseau and Prof. Remzi H. Arpaci-Dusseau <i>Expected May 2015</i>
	MS in Computer Science, University of Wisconsin Madison CGPA 3.875/4 <i>May 2011</i>
	B.E. in Computer Science, College of Engineering Guindy, Anna University, India CGPA 9.12/10 <i>May 2009</i>
Research Interests	Operating systems, file systems, storage systems
Experience	Research Assistant , UW Madison • Working with Prof Andrea and Prof Remzi on file system consistency and reliability <i>January 2010 - present</i>
	Intern , Microsoft Research • Worked on load balancing for Cosmos, a distributed storage system • Helped increase scalability of the system <i>Summer 2012</i>
	Intern , Google • Worked on the successor to the Google File System, Colossus • Added to the disaster recovery capabilities of the system <i>Summer 2010</i>
	Intern , Networks Lab, Indian Institute of Technology, Madras • Worked on providing Single Sign On and other services for the users of a wide-area network connecting 8 colleges across the state • Built a distributed testbed for network experiments <i>Summer 2008</i>
	Intern , HeyMath!, Chennai, India • Created a mailing engine to serve the mass mailing needs of HeyMath! • The user interface was designed such that even laymen users could easily use the web application. <i>Summer 2007</i>
Publications	Consistency Without Ordering Vijay Chidambaram, Tushar Sharma, Andrea C. Arpaci-Dusseau, Remzi H. Arpaci-Dusseau <i>USENIX Conference on File and Storage Technologies (FAST 2012)</i>

Designing Persuasive Robots: How Robots Might Persuade People Using Vocal and Nonverbal Cues

Vijay Chidambaram, Yueh-Hsuan Chiang, Bilge Mutlu

International Conference on Human Robot Interaction (HRI 2012)

Coerced Cache Eviction: Dealing with Misbehaving Disks through Discreet-Mode Journaling

Abhishek Rajimwale, Vijay Chidambaram, Deepak Ramamurthi,

Andrea C. Arpaci-Dusseau, Remzi H. Arpaci-Dusseau

International Conference on Dependable Systems and Networks (DSN 2011)

Design-space exploration of flash augmented architectures

Thanumalayan S, Vijay Chidambaram, Ranjani Parthasarathi

Student Research Symposium, International Conference on High Performance Computing (HiPC 2008)

Projects

No-Order File System

Spring 2011 - Fall 2011

- Defined the different levels of consistency provided by file systems, and the mechanism needed to provide each level
- Designed and implemented the No-Order File System (NoFS) which provides consistency without resorting to the use of ordering points

Coerced Cache Eviction

Spring 2010 - Fall 2010

- Technique to force writes to disk where disks do not properly obey cache flush commands
- Implemented and tested in ext3 filesystem via a new journalling mode called Discreet Mode Journalling

Small scale distributed key-value store

Spring 2009

- Distributed key-value store, modeled on Dynamo, capable of handling node and network failures
- Implemented in Google Go

Performance Analysis of Memcached

Fall 2009

- Carried out performance analysis of memcached, a distributed object store
- Investigated gains from providing operating system support for memcached

Flash Augmented Architectures - Senior Year Undergraduate Project 2008- 2009

- Examined the effects of introducing flash and SSD storage in today's storage hierarchy
- Design replaced all of main and secondary memory with SSD storage
- Analyzed the side-effects of the design and applications which might potentially benefit from such a design

GENIE - Distributed Testbed for Network Experiments

Summer 2008

- User can specify the topology of the virtual network graphically
- Parameters of the virtual network such as link bandwidth and delay can be specified by the user

Computer Skills

Operating Systems: Windows, Linux
Languages: C, C++

Academic Honors	Alumni Scholarship, University of Wisconsin-Madison, 2009	
Leadership Activities	Google Student Ambassador , University of Wisconsin Madison	<i>2010-2011</i>
	Head of Web Operations , Kurukshetra (National Tech-Fest of College Of Engineering, Guindy)	<i>2009</i>
	Google Campus Ambassador , College of Engineering Guindy	<i>2007-2008</i>
	Executive Director , Computer Society Of Anna University (Largest student org on campus)	<i>2007-2008</i>
Other Achievements	Among Top 20 out of 200 teams in the International Collegiate Programming Contest North Central America Regionals	<i>2009</i>
	Among Top 5 Conceptors on Topcoder, a competitive software development portal. Conceptors work with the clients and the software designers to mesh out client requirements technically	<i>2009</i>
	Conceived and designed Riddles of the Sphinx 2008 and 2007, online technical hunts conducted during Kurukshetra. Both ROS events attracted more than 200,000 participants from around the world	<i>2007-2008</i>
	Conducted Sparks and Prodigy, events aimed at exposing school children to technology	<i>2007-2008</i>
	Conducted several online and onsite programming contests	<i>2007-2009</i>