

Arjun Narayan

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INTERESTS	Distributed systems, databases, robustness guarantees, scalability, security.	
EDUCATION	UNIVERSITY OF PENNSYLVANIA	Philadelphia, PA
	Ph.D. in Computer Science	July 2015
	M.Eng. in Computer Science	August 2013
	Research Area: Privacy, Distributed Systems, Security	
	Advisor: Andreas Haeberlen	
	WILLIAMS COLLEGE	Williamstown, MA
	<i>Bachelor of Arts</i> in Computer Science and Economics	June 2010
	CAMBRIDGE UNIVERSITY	Cambridge, UK
	<i>Tripas Part II</i> in Computer Science	2008-09
	As a year of study abroad from Williams College.	
	Course of study was identical to a final year Cambridge undergraduate student.	
PROFESSIONAL EXPERIENCE	MICROSOFT RESEARCH	Redmond, WA
	<i>Research Intern</i>	May 2013-August 2013
	I worked on a project to build a statically verified differentially private runtime. This runtime was built atop a larger project to build a verified OS kernel from the ground up.	
	ITA SOFTWARE	Cambridge, Massachusetts
	<i>Summer Intern, Engineering</i>	May 2008-August 2008
	KANE CAPITAL MANAGEMENT	Cambridge, Massachusetts
	<i>Summer Associate</i>	May 2007-August 2007
TEACHING EXPERIENCE	TEACHING ASSISTANT, CIS 555	Spring 2012
	TEACHING ASSISTANT, MKSE 212	Fall 2011
	TA for two courses, one graduate and one undergraduate. My responsibilities were grading coding assignments, written exams, and holding weekly office hours.	
	TEACHING ASSISTANT, WILLIAMS COLLEGE	
	<i>Department of Computer Science:</i>	
	CS 373 Artificial Intelligence	
	CS 237 Computer Organization and Design	
	CS 109 Introduction to Computer Graphics	
	<i>Department of Economics:</i>	
	Econ 251 Intermediate Microeconomics	
	Responsibilities included grading quizzes and holding office hours with students.	
AWARDS	<i>Facebook Graduate Fellowship</i> finalist.	2013
	<i>Yahoo Key Scientific Challenges</i> graduate student award (\$5000 prize).	2012
LANGUAGES	Fluent: OCaml, Java, C Comfortable: Python, R	

PUBLICATIONS *Distributed Differential Privacy and Applications*

Arjun Narayan
PhD Thesis, University of Pennsylvania.

Verifiable Differential Privacy

Arjun Narayan, Ariel Feldman, Antonis Papadimitriou, Andreas Haeberlen
ACM European Conference on Computer Systems (**EuroSys 2015**).

Compute Globally, Act Locally: Protecting Federated Systems from Systemic Threats

Arjun Narayan, Antonis Papadimitriou, Andreas Haeberlen
Workshop on Hot Topics in System Dependability (**HotDep 2014**).

Ironclad Apps: End-to-End Security via Automated Full-System Verification

Chris Hawblitzel, Jon Howell, Jacob R. Lorch, Arjun Narayan, Bryan Parno, Danfeng Zhang, Brian Zill
USENIX Symposium on Operating Systems Design and Implementation (**OSDI 2014**).

Differential Privacy: An Economic Method for Choosing Epsilon

Justin Hsu, Marco Gaboardi, Andreas Haeberlen, Sanjeev Khanna, Arjun Narayan, Benjamin C. Pierce, Aaron Roth
IEEE Computer Security Foundations Symposium (**CSF 2014**).

Linear Dependent Types for Differential Privacy

Marco Gaboardi, Andreas Haeberlen, Justin Hsu, Arjun Narayan, Benjamin C. Pierce
ACM Symposium on Principles of Programming Languages (**POPL 2013**).

DJoin: Differentially Private Join Queries over Distributed Databases

Arjun Narayan and Andreas Haeberlen
USENIX Symposium on Operating Systems Design and Implementation (**OSDI 2012**).

Secure Network Provenance

Wenchao Zhou, Qiong Fei, Arjun Narayan, Andreas Haeberlen, Boon Thau Loo, Micah Sherr
ACM Symposium on Operating Systems Principles (**SOSP 2011**).

Differential Privacy Under Fire

Andreas Haeberlen, Benjamin C. Pierce, Arjun Narayan
USENIX Security Symposium (**USENIX Security 2011**).