

Shaon Barman

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EDUCATION	PhD in Computer Science University of California, Berkeley	Aug 2009 – Dec 2015
	B.S. in Computer Science University of Texas at Austin	Aug 2005 – May 2009
	<ul style="list-style-type: none">• GPA: 3.98 / 4.00 • Credit Hours: 177• Turing Scholar (CS Honors Program) and Dean Scholar	
THESES	PhD Thesis – End-User Record and Replay for the Web	
	<ul style="list-style-type: none">• Advised by Ras Bodik• Researched a record and replay system for webpages, so that end-users can automate interactions on a website. We also built more expressive end-user applications, such as a tool for web-scraping by demonstration.	
	Undergraduate Honors Thesis – Aster: Automatic abstract syntax	
	<ul style="list-style-type: none">• Researched the conversion between concrete syntax and abstract syntax	
EXPERIENCE	Full Stack Software Engineer – Captricity	May 2016 – May 2017
	<ul style="list-style-type: none">• Fixed reliability and scalability issues through benchmarking, leading to a 10x speedup of a major bottleneck• Developed a new backend for Celery (a distributed task queue) using Redis sorted sets. The backend allowed Celery to prioritize tasks based upon a due date (https://github.com/Captricity/kombu-redis-priority)• Built a monitoring system for Celery to proactively identify and retry failed tasks• Increased Mechanical Turk worker efficiency by developing a new UI, implemented in Angular• Refactored accounting code to charge for new features and fixed concurrency issues	
	Teaching Assistant – UC Berkeley	Fall 2014, Spring 2012
	<ul style="list-style-type: none">• CS 164: Hack Your Language! taught by Ras Bodik• Received ratings of 4.8 / 5.0 and 4.0 / 5.0 from student reviews	
	Software Engineer Intern – Mozilla	May 2011 – Aug 2011
	<ul style="list-style-type: none">• Implemented initial prototype of PDF reader written in JavaScript (pdf.js)	
	Research Intern – IBM Research	May 2010 – Jul 2010
	<ul style="list-style-type: none">• Implemented a fault localization tool using symbolic programming	
	Software Engineer Intern – Google	May 2008 – Aug 2008
	<ul style="list-style-type: none">• Worked on AdWords Front End Conversion Tracking• Implemented new UI to integrate Adwords and Analytics	
	Software Development Engineer Intern – Microsoft	May 2007 – Aug 2007
	<ul style="list-style-type: none">• Worked on System Center Service Manager• Integrated PowerShell into the existing task infrastructure	
PUBLICATIONS	Shaon Barman , Sarah Chasins, Rastislav Bodik and Sumit Gulwani. “Ringer: Web Automation by Demonstration”. OOPSLA 2016.	
	Shaon Barman , Rastislav Bodik, Satish Chandra, Emina Torlak, Arka Bhattacharya, and David Culler. “Toward Tool Support for Interactive Synthesis”. Onward! 2015.	
	Chandra, Satish, Emina Torlak, Shaon Barman , and Rastislav Bodik. “Angelic Debugging”. ICSE ’11.	
	Bodik, Rastislav, Satish Chandra, Joel Galenson, Doug Kimelman, Nicholas Tung, Shaon Barman , and Casey Rodarmor. “Programming with Angelic Nondeterminism”. POPL ’10.	
SELECTED GRADUATE COURSEWORK	Audited Bridging the Digital Divide – Instructor: Yahel Ben-David	
	<ul style="list-style-type: none">• Learned about the Further Reach network, a wireless broadband ISP serving a rural, sparsely-populated area	
	Eat. Think. Design – Instructor: Jaspal Sandhu	
	<ul style="list-style-type: none">• Applied the design process to find new ways of increasing access to healthy foods within the Navajo Nation	
	Cyberlaw – Instructor: Brian Carver	
	<ul style="list-style-type: none">• Wrote a Wikipedia article on the US Supreme Court case <i>United States v. Cotterman</i>	
	Human Computer Interaction – Instructor: Björn Hartmann	
	<ul style="list-style-type: none">• Developed a new IVR system for NextDrop, a project to crowdsource water availability information in India	
	Cellphones as a Computing Platform – Instructor: Eric Brewer	
	<ul style="list-style-type: none">• Helped create a system to record EKGs using a Nokia N900 cell phone and inexpensive circuits	
PROGRAMMING LANGUAGES	Javascript - Intermediate knowledge Java - Basic knowledge	Python - Intermediate knowledge Scala - Basic knowledge