

# AMIR SABOURY

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## Education

2014–today	<b>M. Sc. Software Engineering</b> – <i>École Polytechnique de Montréal</i> SWAT (the SoftWare Analytics and Technologies) Lab
2008–2013	<b>B. Sc. Computer Engineering – Software.</b> – <i>ECE Faculty - University of Tehran</i> Relevant Coursework GPA: 18.12 out of 20 (3.85 out of 4) Last two years GPA: 16.01 out of 20 (3.15 out of 4)

## Research Interests

Large Scale & Cloud-based Softwares  
Web systems and Service Oriented Architecture

## Honors & Awards

May 2012	<b>ACM International Collegiate Programming Contest World Finals</b> Ranked 83 <sup>rd</sup> , University of Warsaw, Poland.
Nov. 2012	<b>ACM International Collegiate Programming Contest Asia Region, Tehran Site</b> Ranked 2 <sup>nd</sup> , University of Tehran, Iran. <i>Qualified for the ACM International Collegiate Programming Contest World Finals.</i>
Nov. 2011	<b>ACM International Collegiate Programming Contest Asia Region, Tehran Site</b> Ranked 4 <sup>th</sup> , Sharif University of Tech., Iran.
2011 – 2012	<b>ACM Excellence Award</b> - UT ACM Website team head, New York, USA.

## Research Experiences

### Web Application Scaling

*Under supervision of Dr. Ramtin Khosravi. Fall 2012 - Spring 2013.*

As the internet scales up day by day, our social networks and web applications will have more users. Managing thousands to millions of users in the same time is not an easy task. My thesis is about profiling, horizontal scaling and performance improving of Php/MySQL web applications.

## Work Experiences

2011 – 2012	<b>Maxa</b> Worked as a Developer, Web Master and Graphic Designer. <i>Member of PHP/MySQL tuning &amp; performance team.</i>
2008 - today	<b>Iranian Chemical Society</b> Working as the Server Administrator, Web Master, Developer and Graphic Designer.

## Skills

Programming	C, C++, Java, PHP, Javascript, SQL Python, Prolog, Actionscript, Befunge Bash Script, C#, MATLAB, LISP	<i>Guru</i> <i>Expert</i> <i>Familiar</i>
Tools	MySQL, Apache, Hadoop, Map-Reduce, Nodejs, ORM, HTML5, CSS3, jQuery, , MVC, OpenGL, MemSQL, Photoshop, Flash, Dreamwaver, Bootstrap, MangoDB, CouchDB, Nginx, GIT, XHProf, Comet, Web Sockets, JSON, PHP Frameworks	
Technical	Server Administration, Web Security, Web Design, NoSQL, Profiling & Scaling, Database Design, Web application Design and develop.	

## Teaching Experiences

Summer 2013	<b>Advanced Javascript</b> - Instructor. <i>ACM Student Chapter, ECE, UT</i>
Summer 2013	<b>Programing Competition &amp; Algorithms</b> - Instructor. <i>ACM Student Chapter, ECE, UT</i>
Spring 2013	<b>Internet Engineering</b> - Teaching Assistant. <i>Dr. Ramtin Khosravi, ECE, UT</i>
Fall 2012	<b>Database Systems</b> - Teaching Assistant. <i>Dr. Azadeh Shakery, ECE, UT</i>
Summer 2012	<b>Web Design</b> - Instructor. <i>ACM Student Chapter, ECE, UT</i>
Summer 2012	<b>Programing Competition</b> - Instructor. <i>ACM Student Chapter, ECE, UT</i>
Spring 2012	<b>Internet Engineering</b> - Teaching Assistant. <i>Dr. Ramtin Khosravi, ECE, UT</i>
Spring 2012	<b>Algorithms Design &amp; Analysis</b> - Teaching Assistant. <i>Dr. Hamid Mahini, ECE, UT</i>
Spring 2012	<b>Advanced Programing</b> - Teaching Assistant. <i>Dr. Ramtin Khosravi, ECE, UT</i>
Fall 2011	<b>Database Systems</b> - Teaching Assistant. <i>Dr. Masoud Rahgozar, ECE, UT</i>
Fall 2011	<b>Data Structures &amp; Algorithms</b> - Teaching Assistant. <i>Dr. Heshaam Faili, ECE, UT</i>
Fall 2011	<b>Advanced Programing</b> - Teaching Assistant. <i>Dr. Ramtin Khosravi, ECE, UT</i>

## Selected Projects

2014-today	<b>Migrating Application to the Clouds</b> An empirical evaluation of design patterns and anti-patterns in Cloud-based applications <i>Implementing and testing design patterns and scenarios in migrating applications to the clouds.</i>
2014-today	<b>MapReduce Scheduler</b> Performance Modeling and Analysis of MapReduce Workloads <i>Simulating real scenarios in Hadoop MapReduce framework and implementing smarter scheduler for the job queue to gain better overall performance.</i>
Summer 2011	<b>ShareCode</b> — <i>Founder, CEO &amp; Developer.</i> Online judge and Social network for geeks who love Algorithms, Programming & Challenges. <i>Used PHP/MySQL/CodeIgniter/HTML/JS/C++/MongoDB</i>
Fall 2011	<b>Distributed Database</b> — <i>Course project of Computer Networks.</i> Peer-to-peer, reliable & scalable database that uses MySQL in the core. <i>Used Java/Bash Script/MySQL/Linux</i>
Summer 2011	<b>ZaghCiah</b> — <i>Internship project.</i> A web application serves monitoring services for web applications' availability. <i>Used PHP/MySQL/CodeIgniter/HTML/Javascript</i>
Spring 2009	<b>Chatting System</b> — <i>Final Course Projects of Advanced Programing.</i> A multi-user & multi-threaded Graphical client/server chat software. <i>Used C++/Linux/SDL/Linux</i>
Spring 2010	<b>UTAK2 Compiler</b> — <i>Final Course Project of Design &amp; Implementing Compilers.</i> Designed & Implemented a programming language called UTAK2 & it's compiler. <i>Used C/Lex/YACC/Linux</i>
Fall 2012	<b>Befunge-98 Interpreter</b> — <i>Open-Sourced Project.</i> Implemented the first Befunge-98 interpreter in javascript. <i>Used Javascript/jQuery/HTML</i>
Fall 2011	<b>Processor Design</b> — <i>Course Projects of Computer Architecture.</i> Designed Single-cycle, Multi-cycle and Pipelined CPU. <i>Used Verilog/ModelSIM/Quartus</i>
Summer 2008	<b>Journal Subscription Management</b> — <i>Chemical Society Project</i> Web application for managing subscription of journals. <i>Used PHP/MySQL/JS</i>

## Language Skills

Persian	Native.
English	Fluent.

## Leadership & Membership

2010 – today	<b>ACM ICPC Local Contests</b> Judge. <i>ECE, University of Tehran.</i>
2011 – today	<b>ACM Scientific Journal (F1)</b> Editorial board member & Graphic Designer.
Spring 2013	<b>FSEN2013</b> Fundamentals of Software Eng. Conf. Organization team member. <i>IPM, Tehran, Iran.</i>
Spring 2011	<b>FSEN2011</b> Fundamentals of Software Eng. Conf. Organization team member. <i>IPM, Tehran, Iran.</i>
2010 – today	<b>ACM AI Contests'</b> Judge & Organizer. <i>ECE, University of Tehran.</i>
2008 – 2009	<b>Student Council Representative</b> Member. <i>ECE, University of Tehran</i>