

Alper T. Sarikaya

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<http://alpertopia.com>

Education

Bachelor of Science in **Computer Science** with Honors, June 2009

Bachelor of Science in **Chemistry (ACS Certified)** with Honors, June 2009

University of Washington, Seattle, WA, USA

- + Completed over 150 credit-hours in Computer Science and Honors Chemistry classes
- + Courses completed in Computer Science: Discrete Structures, Data Structures, Programming Languages, Digital Logic Design, Digital Hardware Design, Operating Systems, Networks, Security, Databases, Distributed Systems
- + Active researcher: undergrad research on quantum algorithm analysis, graphene-binding peptides

Skills

- + Experienced with the programming environments of Java, Python, and C# interfaces through educational, commercial and personal endeavors
- + Proficient with the Microsoft SQL Server suite of products: t-SQL, MDX, integration services, and data cubes
- + Adept in configuring Microsoft Windows, computer networks, diagnosing technical problems
- + Well-versed in web standards, with extensive knowledge of HTML, PHP, CSS, and jQuery down to the text-level
- + Adept in computational chemistry applications and theory (HyperChem, Gaussian), love for quantum dynamics
- + Ability to explain complex scientific and logical ideas in simplified terms to students and peers

Research / Work Experience

Microsoft, Windows & Windows Live September 2009 – Present
Software Development Engineer in Test, Windows Telemetry *Redmond, WA*

- + Managed, debugged, and fixed robust and active data-driven database systems built on SQL Server
- + Engaged in performance and capacity v-team to gauge and rectify data backload problems

University of Washington, Department of Material Science & Engineering August 2009 – Present
Research Assistant, UW GEMSEC *Seattle, WA*

- + Further developed energy minimization procedures of graphite-binding peptides through computational means
- + Automated repetitive computation chemistry tasks by using TCL scripts

University of Washington, Department of Computer Science & Engineering January 2008 – June 2009
Research Assistant, Quantum Computing Theory Group *Seattle, WA*

- + Developed code in Python using SciPy to test polynomial speedup of adiabatic quantum algorithms
- + Discussed current quantum computation papers and progress at weekly research meetings

University of Washington, Department of Computer Science & Engineering October 2008 – March 2009
Research Assistant, Seattle: <http://seattle.cs.washington.edu> *Seattle, WA*

- + Refactored DHT allocation code, developed a MapReduce framework/project for the RePy framework

University of Washington, Department of History June 2008 – October 2008
Website Developer, <http://depts.washington.edu/kcrg/> *Seattle, WA*

- + Created and designed website utilizing Google Maps API in order to dynamically display research data
- + Worked extensively in a team based environment to meet user needs and specifications

Microsoft, System Center Virtual Machine Manager June 2007 – August 2007
Intern, Software Development Engineer in Test *Redmond, WA*

- + Developed a virtual machine testing tool in C# after 12 weeks experience with both the language and IDE
- + Participated in bug triages, used internal tools to help expedite the bug squashing process before RTM

Buses @ Alpertopia May 2007 – Present
Personal Project, <http://alpertopia.com/transit/>
+ Constructed a web application using Google Maps, SOAP, PHP, XML, and MySQL to display real-time maps of transit buses in the Seattle area to be both visually appealing and informative
+ Developing methods of self-testing and usability-testing to further enhance visual appeal and simplicity of app

University of Washington, Center for Urban Simulation and Policy Analysis January 2007 – June 2007
Research Assistant *Seattle, WA*
+ Practiced test-driven development in Python using both built-in and user-created techniques
+ Organized code/procedural changes by using different mediums: Bugzilla, MediaWiki, CVS, LaTeX

Service Experience

Shorecrest High School, Science Department October 2010 – Present
Chemistry Tutor *Shoreline, WA*
+ Taught core chemistry concepts in small-group and individual settings to high-school students

American Red Cross, Disaster Relief November 2009 – Present
Mass Care Worker, ARC Serving King and Kitsap Counties *Seattle, WA*
+ Volunteered in emergency shelters for local apartment fires, including basic first-aid care and feeding

University of Washington, Computer Science & Engineering Department January 2008 – December 2008
Teaching Assistant – Computer Networks (2), Operating Systems *Seattle, WA*
+ Actively assisted in engineering problem solving with students related to class projects of varying complexity

Boy Scouts of America, Troop 348 Fall 1993 – Summer 2006
Eagle Scout *Lake Forest Park, WA*
+ Gained extensive experience in leadership and teamwork working with a wide variety of community members