Andrew W Zhao

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EDUCATION

Berkeley, CA

University of California, Berkeley

Aug 2013 - May 2017

Bachelor, Computer Science

Technical GPA: 3.5 Cumulative GPA: 3.3

EXPERIENCE

Integra Telecom, Vancouver WA

Business Intelligence Intern

Jun 2015 – Aug 2015

- Learned how to utilize Microsoft SQL Server and Tableau to work with relational databases.
- Used Microsoft SQL Server to develop queries that aggregated data into data sources for business users.
- Automated data reports to solve long standing ease-of-use issues.
- Significantly reduced weekly load on production servers by optimizing problematic queries, most notably reducing a 3+ hour query down to a few minutes.

Saltire Software, Tigard OR

ASE Intern

Jun 2012 - Aug 2012

- Utilized Geometry Expressions and iBooks Author to create an eBook version of Euclid's Elements.
- Used Geometry Expressions to create interactive diagrams to illustrate the eBook.
- Explored the limits of Geometry Expressions to generate ideas for new features.
- The eBook can be found at http://goo.gl/lbiWlu.

Lincoln High School, Portland OR

Peer Tutor/TA in Math

Jan 2011 - Jun 2013

Figured out simpler ways of explaining math concepts to those who needed help.

PROJECTS

• XML Extraction:

- Designed and implemented a table-driven SQL Server framework for analyzing XML files.
- Hosted code reviews to get advice from team members for general and scalable design decisions.

• Kids First Project:

- Used HTML/CSS with the Bootstrap framework to create a website for a nonprofit organization.
- o Can be found at http://kidsfirstproject.org.

• Tic-tac-toe:

- o Designed a two player Tic-tac-toe game using HTML/CSS and the Ruby on Rails framework.
- Implemented game functionality and logic using Javascript.
- o Can be found at http://calm-atoll-9489.herokuapp.com/

Sliding puzzles:

- Utilized the Apache Spark framework to apply MapReduce to finding all states of the Fifteen puzzle.
- o Ran the implementation on the Amazon EC2 servers to solve puzzles of larger dimensions.

Message compression:

- Used Python to create a program that compresses and decompresses messages.
- o By assigning more popular characters to shorter bit strings, achieved an average of 35% compression.

SKILLS

- Proficient with Python, C, SQL Server, HTML, CSS, Tableau.
- Familiar with Ruby on Rails, JavaScript/JQuery, Bootstrap, Java, LaTeX, SSIS.
- Able to utilize OpenMP, Intel SSE Intrinsics, and MapReduce through Apache Spark/Hadoop.

KEY COURSEWORK

Completed:

•	CS 170:	Efficient Algorithms and Intractable Problems	Spring 2015
•	CS 188:	Introduction to Artificial Intelligence	Spring 2015

Currently taking:

•	CS 186:	Introduction to Database Systems	Fall 2015
•	CS 162:	Operating Systems and System Programming	Fall 2015
•	CS 168:	Introduction to the Internet: Architecture and Protocols	Fall 2015