

# Perry Zheng

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## EDUCATION

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### Duke University, Durham, NC

Graduated May, 2010

- Graduating with *High Distinction in Economics (B.S.)*.
- Double major in Economics (B.S.) and Computer Science (A.B), and minor in Mathematics (one class away from a B.S major).
- **Major GPA:** 3.76
- **GRE:** 1550 (750V, 800M – 99.9% percentile)

### Dupont Manual High School, Louisville, KY

Graduated May, 2006

- **SAT:** 2280 (700V, 800M, 780 Wr) **ACT:** 34 (32V, 34M, 32Wr, 34S)
- **AP National Scholar, AP State Scholar** – 15 AP Exams taken, 12 fives and fours, 3 threes; 8 independently studied (including both Physics C). The only male representative of Kentucky.
- **USAMO (USA Mathematical Olympiad)** (Index Score 199/300), third highest scorer in Kentucky, top 500 in the nation

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## WORK EXPERIENCE

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### PayScale, Inc.

August 2010 – Present

*Software Development Engineer*

- Building robust, scalable, and innovative web applications for PayScale - world's largest salary data provider. Involved in the technical design, architecture, and implementation of PayScale's consumer products.
- Features include a new job board, new employer pages that allow users to view salary information of all jobs for a given company, a new email platform, and a new computed field degree-major in search index. Developing in C# and ASP.NET.
- Hack day projects include a mobile prototype of PayScale's survey, an iPhone app of PayScale's salary calculator, and PayScale's spin-off of googleflight.com where two people could "fight off" based on their estimated pays.

### Duke University, Department of Computer Science

Summer 2009 – May 2010

*Research Assistant to Professor Jun Yang*

- Independently developed a system with enhanced repository (ERS) functionalities, including XML/relational database mapping, data modeling features such as inheritance, automatically computed attributes, as well as an XML-powered UI that supports data modeling and object instantiation.
- Project will eventually evolve into ERS-MSI, which builds on top of ERS and provides types/templates for capturing experimental and computational workflows in biomedical research and will be used by the Duke University Hospital.
- Created in Java a SSH transfer system that allowed download and upload of large files while retaining control to databases.

### Duke University, Department of Economics

Fall 2009 – Spring 2010

*Honors Thesis under Professor Emma Rasiel*

- Co-authored *Rebalancing, Conditional Value at Risk, and t-Copula in Asset Allocation* with Irvin Wang
- Investigated use of rebalancing with fat tail distributions and optimizing with downside risk as consideration.
- The paper received High Distinction from the Department of Economics, the highest honor that was awarded to 23 students among over 200 economics majors.

### Duke Association of Computing Machinery

Fall 2007 – Spring 2010

*President (2009-2010), Treasurer (2008-2009), Member (2007-2008)*

- Organized talks, social events and prepared presentations for undergraduates interested in computing.
- Helped connect Duke undergraduates interested in computer science with professionals in industry and expose students to computer science-related opportunities.
- Hosted recruitment sessions from major companies such as Microsoft and Deutsche Bank.

### Duke University, Department of Computer Science

Fall 2009

*Undergraduate Teaching Assistant*

- Held weekly office hours for students to discuss programming projects and course content for Computer Science 6
- Graded programming assignments and attend weekly meetings with the professor

### Art of Problem Solving

Summer 2009 – Spring 2010

*Teaching Assistant*

- Weekly classes for students preparing for national mathematical exams such as the American Mathematical Contest
- Assisted in the AMC 10 and Introduction to Probability classes. Helped students understand course material, moderated class forum, and graded problem sets.

## **Duke Smart Home**

**Fall 2008 – Spring 2009**

### *Co-Project Leader*

- Co-leader of “Team Sentience” with Andrew First – worked with a team of 10 students to develop a system that helped locate and track residents in the Smart Home with accuracy. Cisco Innovation Award finalist for two consecutive years.
- Specialized in developing efficient probabilistic algorithms such as k-nearest neighbor, R-Tree, X-Tree, Sequential Monte Carlo etc, to accurately locate residents in the house.

## **National Evolutionary Synthesis Lab (Nescent)**

**Summer 2008**

### *Research Assistant to Dr. Ganesh Ganapathy*

- Implemented and designed a statistical program that explores how migration rates affect speciation and extinction rates of species. Paper title: *The Effect of Migration on Speciation and Extinction Rates: A Sample-based Approach*
- Bayesian approach by running Monte Carlo Markov Chain simulation on phylogenetic data.

## **Campus Destinations**

**2008 Summer**

### *Software Intern*

- Designed, implemented, and code specific functionalities for the startup company.
- Improved the search engine by introducing facility/accessories search (such as Wi-Fi Access) for twelve top-ranked universities.

## **Center for Cognitive Neuroscience, Woldorff Lab**

**2007 – 2008**

### *Research Assistant to Professor Lawrence Greg Appelbaum*

- Independently ran experimental subjects, collected and analyzed data with professional software
- Coded experimental trial simulations in MATLAB
- Acknowledged in the research paper exploring brain response to congruent versus incongruent stimuli.

## **Duke Math Union & Problem Solving Seminar**

**2006 – 2007, 2009 – 2010**

- Meets 2 hours a week discussing problems from the Putnam Math Competition.
- Helped organize the annual Duke Math Meet, a regional math competition for high school students.
- Scored in the top 25% of all test takers on the 2009 Putnam exam. Score: 12.

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## **PROJECTS AND AWARDS**

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### **1<sup>st</sup> Place AT&T Mobile Hackathon**

**July 2011**

- <http://bit.ly/nQbE4I>
- And 1<sup>st</sup> Place GeekWire’s Gdgt Live Contest (<http://bit.ly/noYFF>) with Headshot, an augmented reality laser tag game (<http://www.headshotnow.com>). Developed in C# and Windows Mango SDK.

### **Bible Verses Mobile Web App**

**August 2011 – November 2011**

- <http://icomsea.org>
- Initially created for Seattle’s International Community, a Christian fellowship associated with the City Church, this mobile app allows you to read, listen, and edit bible verses on the go. Developed independently in Ruby on Rails and JQuery Mobile.

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## **COMPUTER SKILLS**

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Languages: Competent in Java, Python, MATLAB, proficient in C, and C++, experience with HTML, CSS, PHP, and MySQL

Tools: Competent in Vimperator (VIM for Firefox), VIM, and DVORAK keyboard (primary keyboard)