Yan Zhao

Objective **Backends engineer dedicating to deliver reliable, performant and scalable applications.**

Contact Information
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Education

University of California, Berkeley **August 2011 – present**
B.S. in Electrical Engineering and Computer Science *GPA/Technical GPA: 3.82/3.82*
Expected graduation date: May 2014
Recruited into Eta Kappa Nu during sophomore year
Selected Coursework: Data Structure · Machine Structure · Communication Networks · Algorithm · Artificial Intelligence · Computer Graphics · Operating System · Computer Architecture · Database Systems · Software Engineering

Work Experience

University of California, Berkeley **August 2013 – Present**
Course Staff
Reader of CS184 - Foundations of Computer Graphics
· Reviewing and grading students homework and projects. · Creating automatic script for grading and reviewing purposes.

The Aspire Lab - Berkeley **August 2013 – January 2014**
Research Assistant
SEJITS related projects led by Professor Armando Fox
· Working on integrating Three Finger Jack, a python specializer, with current Asp (A SEJITS Implementation for Python) framework. · Running Apache Spark on Amazon EC2 computers.

GoDaddy.com, LLC **May 2013 – December 2013**
Software Developer Intern
Web developer with Ruby on Rails - working on E-commerce platform
· Modified and updated a database routing library for multi-tenancy web application. · Participated in the implementation of internal Single Sign-on system for the web application. · Override ActiveRecord 3.2.14 for thread safety in the situation of multi-threads app server. · Evaluated open source e-commerce frameworks including Spree with Rails, Oscar with Django, and BroadLeaf with Spring.

University of California, Berkeley **August 2012 – May 2013**
Course Staff
Reader of CS61A - The Structure and Interpretation of Computer Programs
· Evaluated and advised students' homework and projects on style and correctness. · Group graded student's exams with other course staffs. · Coached students in code writing and composition style during office hours. · Communicated with course staffs about student's feedbacks.

Selected Projects

Global Illumination Renderer and Physically-based Cloth Simulation in C++
Dual Project as final design for CS 184 Computer Graphics
· Combines direct illumination, indirect illumination, and caustic to achieve global illumination.
· Supports axis-aligned bounding boxes tree to accelerate the render speed to log asymptotically fast.
· Supports various visual effects including Phong Shading, Depth of Field, Reflection and Refraction.
· Simulates stretching/sheering force with energy condition and bending force with edge spring.
· Implements sphere and cube collision detection/correction, as well as effects of aerodynamic force.
· Showcase: yanzhao.me/project/raytracer & yanzhao.me/project/clothsim

Other Projects:
· SimpleDB - A database management system supporting SQL and concurrency control with *Java*.
· PeakDemand - SaaS to record future demands for resources to help scheduling with *Ruby on Rails*.

Technical Skills

Proficiency in C++, C, Java, Python, Ruby, Rails, HTML, CSS, SQL, Agile Methodology.
Experience in OpenMP, OpenGL, OpenCV, Maya, Objective-C, JavaScript, jQuery, Scala, Hadoop.