2607 Western Ave, Apt #252, Seattle, WA 98121
408 876 8240 me@vincentwoo.com

VINCENT WOO

EDUCATION

2006 - 2009 University of California, Berkeley
Bachelor of Science in Electronics Engineering and Computer Science

- Machine Structures and Architecture
- Artificial Intelligence and Game Theory
- Computer Graphics
- Compilers and Programming Languages
- Algorithms and CS Theory

EMPLOYMENT

2010 - Present Amazon.com
Software Development Engineer

- All code developed in the context of the scalability and high availability demands of Amazon's internal Service Level Agreement
- Aggregate disparate inputs like UPS shipping feeds and customer orders to allow third-party merchants to sell through Amazon
- Work with systems built on publish/subscribe protocols that listen to feeds and automatically recover from faults.

Summer 2009 StatusBound
Software Development Contractor

- Built an automated publishing system on top of Adobe's inDesign Server.
- Aggregates Facebook information and outputs a custom PDF based on professionally designed layouts.

Summer 2008 Zynga
Software Development Intern

- Interned for Facebook's largest application developer. Produced and maintained games with "viral" social appeal.
- Headed a project with three coders and its own unique art and flash assets.

Summer 2007 Zwaggle
Software Development Intern

- Served as an intern at a startup for the exchange of used children's products.
- Built backend metrics for growth tracking and additional user functionality, like group moderation.

INTERESTS

Rationality, post-humanism, photography, artificial intelligence, exploring old buildings, deep dish pizza, cheating at videogames, typography, and anything by Gene Wolfe.

SKILLSET

C(++)

- Built a Python to native bytecode compiler with full dynamic typing and object reflection
- Wrote a Raytracer with multisampling, depth of field, and refractive photon mapping support
- Reverse engineered Battlefield: Bad Company 2 to build a hack with fully ballistic, predictive aiming calculations

Java

- Developed Java systems that communicate with any arbitrary client through Amazon defined protocols
- Improved Amazon's inbound shipment routing efficiency by building better controls for where shipments end up
- Memory leak sleuthing through heap dump analysis

Ruby (on Rails)

- Wrote Zynga games that were backed by RoR and piped through the Facebook application layer
- Scaled games to millions of users using Mongrel clusters and an agile development cycle
- Built games that could push data to clients in real-time without relying on client polling, using an open socket
- Deployed multiple CMS environments for Amazon European employees to translate marketing materials that automatically deploy to outward-facing Apache clusters

(X)HTML, CSS, JavaScript

- Developed UI frontends for Zwaggle and Zynga using cross browser compatible CSS and XHTML
- Built AJAX powered frontends for Zynga that could bridge local Flash objects and remote game servers

Oracle, MySQL, BDB, and other various databases

- Proficient at using optimistic locking, proper indexing, and careful data delta logging to support transactions, scaling, and auditing, respectively
- Familiar with abstractions like hibernate and ActiveRecord

UNIX, LINUX variants

- Operational support for Amazon's internal RedHat LINUX fleet via pager rotation.
- Familiar with load balancing and hardware provisioning for distributed applications running on a cloud of virtual machines

Assembly and reverse engineering

- Well versed in reverse engineering the compiled code of videogames and applications, subverting functionality in places and inserting new features in others
- Adept at understanding bytecode produced by compilers using tools like IDA