

Amos Yuen

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EXPERIENCE

- Google** SOFTWARE ENGINEER III SINCE MAY 2016
SOFTWARE ENGINEER II OCTOBER 2014 – MAY 2016
Designed and built the new third party Google People API service that merges contacts and profiles. Implemented internal API for autocomplete and sharing that are used in many products such as Google Photos and Inbox. Migrated infrastructure from old deprecated hardware to new cloud based infrastructure.
- Bungie** ASSOCIATE ENGINEER JANUARY 2013 – SEPTEMBER 2014
Worked closely in an agile environment with designers and testers to architect and develop features for player investment for Destiny in C++ and C#. Areas of ownership include achievements, activities, character customization, levels, database storage, stats, skill trees, and vendors.
- Microsoft** SOFTWARE DEVELOPER ENGINEER INTERN SUMMER 2012
Created a tool for the Kinect that used machine learning to detect skeletal positions with larger errors.
- CMU Graphics Lab** RESEARCH PROGRAMMER FALL 2011
Programmed python scripts to solve 3D tessellation problems and create demos for SIGGRAPH 2013 paper Non-Polynomial Galerkin Projection on Deforming Meshes under Assistant Professor Adrien Treuille.
- Microsoft** SOFTWARE DEVELOPER ENGINEER INTERN SUMMER 2011
Prototyped interactive graph visualizations for Excel in C# and Python that allowed users to link data in different graph types and synchronize selection.
- Facebook** SOFTWARE ENGINEER INTERN SUMMER 2010
Designed and implemented an internal service that uses Microsoft Pivot to visualize and sort thousands of servers on properties such as CPU usage, memory usage, and temperature. Created the backend using Java and Hive; and the frontend using Javascript, PHP, and Silverlight.
- CMU SAILING Lab** RESEARCH PROGRAMMER SPRING 2010
Designed and implement a flash application using Flex that allows biology researchers to easily upload and interactively visualize gene network data called TVNViewer.

EDUCATION

- Carnegie Mellon University** AUGUST 2009 - DECEMBER 2012
B.S. in Computer Science, Minor in Robotics, Cumulative QPA 3.84/4.0
- Choate Rosemary Hall** AUGUST 2006 - JUNE 2009
Cum Laude Society Member
- Relevant Coursework**
AI: Representation & Problem Solving, Algorithm Design and Analysis, Animation of Natural Phenomenon, Calculus in 3D, Computer Game Programming, Computer Graphics, Computer Vision, Creating Intelligent Robots, Introduction to Feedback Control Systems, Introduction to Robotics, Linear Algebra, Parallel Computer Architecture & Programming, Robotic Manipulation

PERSONAL

Citizenship : CANADIAN (H1B Visa)

Interests : HACKATHONS, COOKING, JAPANESE CULTURE, ULTIMATE FRISBEE, VIDEO GAMES, PIANO

PROJECTS

FFmpegVideoRecorder

SINCE SEPTEMBER 2016

Created open source video recording library for Android that allows combing multiple videos, transforming the resolution, and configuring many other video recording parameters.

Zon

SINCE JULY 2016

Designed and implemented the Android app for a social network based on location launched in Thailand.

Law Buddy

DECEMBER 2016

Created a non-profit website prototype using Angular 2.0 that helps people find free legal help.

Charity + Map

FEBRUARY 2013 – MAY 2016

Created a non-profit web application that empowers users to discover, contribute, and track social charitable giving. Used NodeJS + ExpressJS servers running using Docker on Amazon EC2 and DynamoDB as a database. Designed and setup the server architecture and developed the entire UI front end.

Hexabeat MICROSOFT INTERN XAPFEST COMPETITION

SUMMER 2012

Programmed a rhythm game with a hexagonal layout for the windows phone using Silverlight and XNA. Included high score syncing and a song store backed by a linux server. Was a finalist for the competition.

I Broke the Thing GLOBAL GAME JAM

FALL 2012

Programmed a side scrolling platformer in Flash using the Flixel library with an interesting mechanic where the player races their past selves to the time machine in a continuous loop.

Parallel SPH PARALLEL COMPUTER ARCHITECTURE & PROGRAMMING FINAL PROJECT

SPRING 2012

Programmed a parallel interactive implementation of smooth particle hydrodynamics. Implemented it on the CPU using C++, on the GPU using CUDA, and across multiple computers using MPI.

Cave of Elements GAME PROGRAMMING CLASS FINAL PROJECT

FALL 2011

Programmed an isometric 3rd person dungeon crawler in C# using the Unity engine. Rigged and animated walk and attack animations for a human model using Maya.

Ruum YAHOO! OPEN HACK ALL-STARS WINNER

FALL 2011

Created a real time online sharing and collaboration workspace using PHP, MySQL, and JS/AJAX/JQuery in 48 hours. The web application allows users to share files online which other users can comment, edit, and tag.

TacCom: Fury of the Sun God GAME CREATION SOCIETY

FALL 2010 – SPRING 2011

Programmed a 3D RTS game mostly from the ground up as a learning experience. Worked on high level functionality such as pathing, object hierarchies and inheritance, and unit AI.

Zombie Game GAME CREATION SOCIETY

SPRING 2010

Programmed a 2D isometric Victorian zombie action survival game in Python. Hundreds of zombies attempt to maul the player as they run around with a line of supporting redcoats.

BeeStruction GAME CREATION SOCIETY

FALL 2009

Programmed a 2D side scrolling strategy game in C# and XNA about bees taking over the world. The player allocates bees to destroy enemies, assimilate corpses with the hive, and produce more bees.

FlickrThrough CMU YAHOO! HACK U WINNER

FALL 2009

Created a website in 24 hours that dynamically generates photo-mosaics using photos from Flickr that match a user entered search term in PHP.

EBFCheckers STANFORD EPGY SUMMER AI PROGRAM

SUMMER 2008

Volunteered to design and implement a Checkers game system and GUI for the EPGY AI Course Checkers AI Tournament. Also programmed a Checkers AI that placed first in the tournament.

The One CHOATE ROSEMARY HALL 3D GRAPHICS

SPRING 2008

Designed and implemented a 3D FPS in Java from the group up: scanline renderer, game engine, 3D BSP tree, file parsers, object models, levels, textures, and AI.