David Straily   www.straily.com
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Education:

University of Washington, Seattle, WA
Master of Science in Computer Science, March 2014 – March 2016
      -- Overall GPA: 3.79 (4.0 scale)

The Ohio State University, Columbus, OH
Bachelor of Science in Computer Science and Engineering – Minor in Economics, June 2011 **(Completed the 4 year degree in 3 years)**
      -- Overall GPA: 3.137 (4.0 scale)   -- Major GPA: 3.34 (4.0 scale)
Graduated from Dublin Jerome High School in **June of 2008**; Magna cum Laude and an AP Scholar; with 45 transferrable credits to OSU.

Independent Projects:

- Develop, license, and sell commercial Flash games using Flash CS4; scripted in both ActionScript2.0/3.0. **Several million views** across all **14** titles.
      - Game licenses have been sold across several different online portals, including *AddictingGames.com/MTV*, and *WordReference.com*.

- Creator of **StraightStock®**, a machine-learning-based financial prediction model. We leverage institutional options flow to make highly accurate, real-time predictions, in order to help our investors make informed, confident, and profitable trades; every day!

- Run, host, and maintain an Adobe Flash tutorial site; topics cover gameplay, programming, and advanced animation. **www.flashcove.net**

Professional Experience:

343 Industries. Kirkland, Washington -- *Game Developer*   October 2014 – Present

- Primary "network and online engineer" for the critically acclaimed and best-selling Xbox One exclusive, Halo 5: Guardians. My specialization is "life cycle engineering," which includes: 1) Halo 5's rock-solid matchmaking system, 2) our highly-scalable dedicated server technologies, 3) all client to service interactions (over Web socket, HTTP, UDP).

- All my software is developed in highly optimized and multi-threaded C++ to keep to the studio's high resolution, 60 frames-per-second standard.

- $400 million in first week sales, biggest Halo launch in history of franchise. Millions of users, and millions of multiplayer games played per-day. (https://news.xbox.com/2015/11/04/halo-5-guardians-biggest-halo-launch-in-history/)

Microsoft Corp. Redmond, Washington -- *Software Development Engineer (SDE II)*   November 2012 – October 2014

- From initial product conception to V1 product launch, my team and I built out the Xbox's multiplayer system. We developed a core set of functional APIs and shipped a global platform, which backed 15 multiplayer launch titles, to over one million customers on Day 1.

- Primary developer (1 of 2) on the multiplayer infrastructure for Xbox One. Built out an NT Service on the console, which enables the asynchronous matchmaking and 'Party' functionality on the device. As a brief highlight, some notable features I personally implemented (~60% of the code base):
      - Multi-threaded and synchronized scheduler to handle web traffic and session document management, backed by the cloud.
      - Automated 'Quality of Service' management on behalf of titles, for both peer-to-peer and client-to-server game titles.
      - Comprehensive system for asynchronous stranger-based matchmaking, co-op, and private match session establishment and initialization.
      - Multi-user session management, including backend support for both join-in-progress and match-in-progress game flows.

- Provided hands-on consultancy to game studios, regularly engaging in on-site trips, conference calls and on email threads. Focus ranged from diagnosing specific multiplayer issues and implementation, to providing advice on overall multiplayer design. (Assisted studios include: DICE, Respawn, High Moon Studios, Frontier Games, Double Helix, EA Tiburon, EA Canada, PopCap, Iron Galaxy, Capcom Vancouver, Crytek, etc…)

- Credited in **1)** Forza Motorsport 5, **2)** Titanfall, **3)** Evolve, **4)** Minecraft: Xbox One Edition, and **5)** Halo: Master Chief Collection all in regards to my hands-on consultancy described above.

Microsoft Corp. Redmond, Washington -- *Software Development Engineer in Test (SDET)*   July 2011 – November 2012

- Shipped social integration and the new friends UI on the Xbox 360's "Fall of 2011" update. One of two testers on the social integration team; the shipped social integration resulted in over 150,000,000 'shared achievement' impressions for Xbox, on Facebook.

- Comprehensive component testing and functional UI automation lead our feature to over 95% automated code coverage -- the best numbers across the Xbox 360 organization.

Bloomberg L.P. New York, New York -- *Financial Software Developer - Internship*   June 2010 – August 2010

- One of ten interns selected, out of over a hundred, to present my summer's work in front a large body of interns and full-time employees. Basis for selection was due to the encompassing reach of my project (a multimedia editing tool and corresponding client-side player), and the tangible, bottom-line value to the company I provided.

Patents:

- Straily, David. "*Matchmaking in Multiplayer Games*." U.S. Patent Number 9120020. Issued September 1st, 2015.