

Alex Yatskov

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EXPERIENCE

Principal Software Engineer

2019 — Present

Microsoft

Redmond, Washington (USA)

- Rearchitected and modernized GameInput, the input API used on Xbox and the new standard for Windows.
- Rapidly prototyped novel input hardware features, providing early insight into potential applications.
- Provided mentorship and technical leadership to new team members and those early in their careers.
- Implemented low latency HID and USB audio features spanning user, kernel, and firmware spaces.
- Developed a custom crash dump triage system for game controllers, utilizing WinDbg and Watson.
- Designed multiple gaming APIs for Windows and Xbox, wrote specifications and documentation.
- Built an Xbox devkit stress test lab used by external vendors through a custom web dashboard.
- Collaborated closely with external game studios, hardware manufacturers, and other vendors.
- Debugged and resolved complex cross-VM regressions with limited diagnostic information.

Programmer at Large

2016 — 2019

ArenaNet

Bellevue, Washington (USA)

- Engineered a comprehensive streaming solution for open worlds containing millions of objects.
- Designed and implemented a high-performance, versioned archive file format for game assets.
- Developed an external data visualizer for game scene optimization and engine debugging.

Engine Programmer

2007 — 2014

ArenaNet

Bellevue, Washington (USA)

- Developed a novel patching strategy that reduced bandwidth costs for internet cafes in China by over \$100,000.
- Built a streaming map system, similar to Google Maps, for visualizing the game world at multiple zoom levels.
- Integrated a Chromium-based web browser (Awesomium) into the in-game microtransaction shop.
- Designed and implemented engine systems including surface decals, audio zones, and environment maps.
- Created tools enabling designers to rapidly iterate on content through an in-game live preview.
- Engineered environment art and content pipelines to efficiently ingest assets into the game engine.
- Built a web-based dashboard to simplify build monitoring and deployment for the team.

Tools and Gameplay Programmer

2005 — 2007

Amaze Entertainment

Kirkland, Washington (USA)

- Developed a lockstep peer-to-peer multiplayer mode and single-cart “Download Play” functionality.
- Implemented scriptable enemy behaviors, advanced pathfinding, and unique boss encounters.
- Designed and programmed configurable in-game fixed rail and cinematic camera systems.
- Engineered logic for interactive world objects, and created a ‘paper doll’ equipment system.
- Built key features for the custom level editor used across multiple studio projects.

EDUCATION

Keio University

Fujisawa, Kanagawa (Japan)

Master of Science, Cyber Informatics

2014 — 2016

- Presented [research on predictive search](#) at international conferences.
- Completed coursework and attended lectures conducted in Japanese.
- Received the prestigious “Design the Future” full scholarship.

University of Washington

Bothell, Washington (USA)

Bachelor of Science, Computing Software Systems

2001 — 2006

SKILLS

- **Technology:** Windows, Linux, Git, CMake, Docker, Perforce, WinDbg, USB, HID, COM, ETW, WASAPI.
- **Programming languages:** C/C++, Go, Python, Lua, JavaScript, HTML/CSS, C#, Java.
- **Spoken languages:** English, Russian, Japanese (N1 Certified)