

Iakov Sumygin

London | sumygin@gmail.com | github.com/yak32 | twitter.com/yak32

Summary

In my 18+ years of professional development experience, I shipped full featured user-facing products for millions of users on many platforms, from decade old CPUs to powerful modern devices. Winner of several world-wide programming and game development competitions. Custom C++ 3D engine, written at free time, used to launch a game on Google Play market with tens of thousands of downloads.

Experience

SDE | AMAZON LONDON, UK | JAN 2016 -

- Technical project leader on launching Amazon Video on Sony PlayStation 3 and PlayStation 4 – planning, coordinating the team, development of major parts of the app – rendering, video playback, platform compatibility layer.
- Shipped Amazon Video on Sony PlayStation 4 and PlayStation 3 for several million customers worldwide. Shipped first Amazon Prime Video App on Apple TV - the most downloaded Apple TV app in its first week. Release owner of the app.

SENIOR ENGINEER | WARGAMING, SYDNEY, AUSTRALIA | JAN 2015 - DEC 2015

- Worked on updating graphics of the massively multiplayer online game World of Tanks (over 160 million registered players) to support modern graphics APIs. Resolved ~70 graphics issues.
- Engine serialization was fixed to produce the same output on all CPUs to significantly reduce a size of game patches.
- Worked on scripts to move data from SVN to Perforce and back to allow sharing of a source code between offices.

SENIOR ENGINEER | SAMSUNG ELECTRONICS HQ, KOREA | OCT 2005 - DEC 2014

- Project Leader/Coordinator of 3 projects in the Browser team - maintenance of Smart TV Browser on all Samsung TV platforms, new Tizen-based browser, Advanced Browser project – voice/gesture-based browser for Smart TVs.
- Improved usability of the Smart TV browser – auto-completion of URL, smartphone-like scrolling of pages using smart remote, smooth cursor movement on low-level devices. Initiated refactoring of the outdated legacy code.
- Fixed security vulnerabilities, including SQL injections and buffer overflows, completely refactored DB access.
- Ported Adobe Access (DRM solution for Flash), allowed major US content providers to securely stream video content to Samsung TVs.
- Shipped Comcast xFinity App on 2013 Samsung TVs by deployment of special version of Flash.
- Significantly improved performance of UI authoring tool by optimizing memory allocations and various editor functionality.

ENGINEER | SOFT LTD, TURKMENISTAN | OCT 1999 - JUN 2004

- Project leader of “Document Flow” system for Ministry of Foreign Affairs of Turkmenistan – developed UI (including Universal Edit Control) and backend (MS SQL, Transact-SQL based), project was shipped to the Ministry.

GLOW3D | GAME ENGINE | WWW.GLOW3D.COM

- Cross platform 3D game engine, written in C++, targets DirectX 9, 11, OpenGL and OpenGL ES APIs.
- Works on Windows, Mac, Android, IOS, Linux and browser (WebAssembly).
- Supports forward and deferred shading, HBAO+, TXAA, motion blur, Color grading (forward shading on mobile platforms).
- Works on top of the job system, scales to any number of CPU cores. AI navigation by Recast, real-time physics by Bullet.
- Fully functional 3D editor with undo/redo, in-place gaming, cinematic editor.
Iron Cube - Android Voxel game, launched on Google Play Market – more than 40 000 downloads.

Awards

- **Intel Perceptual Computing Challenge, 2013. 1st Prize.** Demo application to edit 3d surface by hands using Intel RealSense 3D Video + Depth Camera. **Intel Level Up 2009 International Challenge.** “I know your Deeds” Game. **1st place** in “Best Game on Intel® Graphics” and **2nd place** in “Best Threaded Game”.