

EDMOND HO

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EXPERIENCE

Co-Founder & Director of Technology / Ravel Virtual Studios / Manhasset, NY / May 2006–present

- Designed and developed bespoke in-house music analysis software to automate most of business-critical workflow.
 - *Version 1*: Suite of plug-ins for Sibelius music notation program, written in ManuScript scripting language.
 - *Version 2*: Stand-alone application written in Tcl/Tk. Added more sophisticated automation functionality. Improved stability significantly, improved run-time performance 50×.
 - *Version 3*: Native Mac OS X 10.6 application, implemented in Objective-C with Cocoa framework, embedded Tcl interpreter, and embedded SQLite database. Improved stability for large workloads.
 - *Version 4*: Optimized version 3. Added more automation functionality, improved run-time performance 2×, and reduced memory usage 10×. Implemented GUI using Cocoa AppKit.
- Designed and developed RVS website and customer interaction web application. Two iterations of each:
 - *Website* (www.ravel-vs.com): Written in XHTML, CSS, and JavaScript with jQuery. Custom lightweight CMS written in PHP5 to pre-generate static pages. Version 2 improved response time 50% and ease of navigation.
 - *Web app*: Written in PHP5 with Zend Framework, MySQL, XHTML, CSS, and JavaScript with jQuery; integrates with Authorize.Net for credit card processing and Amazon S3 for scalable large file hosting.
- Primary graphic designer for promotional materials. Designed corporate logo and identity; logo is a USA registered trademark. Provided art direction for contractors who developed brochures and trade convention booths.

System Specialist, Enterprise Services / royalblue financial (now Fidessa) / New York, NY / May 2005–May 2006

- Member of on-site Fidessa Trading Platform support and development team at Banc [sic] of America Securities equity trading desk. Added and enhanced FIX protocol communication links to other financial institutions.
- Developed new profitability report scripts in Tcl, integrating Fidessa database and internal BAS data services.

PROJECTS

Developer / Independent Project: *Nimbus* / Franklin Square, NY / August 2005–February 2006

- Developed a very lightweight graphics engine that renders realistic-looking clouds, written in C++ using OpenGL and SDL. Wrote Blender plug-in that facilitated cloud asset creation, written in Python.

Developer / Independent Project: *Tactics Big* / Franklin Square, NY / September 2004–April 2005

- Developed a turn-based tactical RPG (about giant robots). Written in C++ using OpenGL and SDL.
- Programmed cel-shaded lighting, UI, and game mechanics. Created all art assets: 3D models with MilkShape 3D and textures with Photoshop. Wrote technical specification and user manual.

Developer / Computer Science Senior Project: *Proper Motion* / Stanford, CA / March 2004–June 2004

- Developed networked multiplayer real-time 3D spaceflight combat simulator, featuring realistic Newtonian physics. Written in C++ using OpenGL and SDL. Worked as graphics, physics, and gameplay programmer in team of two.

EDUCATION

Stanford University / Stanford, CA / B.S. in Computer Science / June 2004

SKILLS

Languages: C, C++, Objective-C, Tcl/Tk, XHTML/HTML5, CSS, JavaScript, PHP5, SQL

Frameworks and APIs: Cocoa, Tcl C API, jQuery, Zend Framework

Protocols/File Formats: MIDI, MusicXML