

Jared Updike

I build beautiful tools and design-informed products with my decades of development experience and passion for graphic design and visual arts.

EDUCATION

2005 **California Institute of Technology**
Bachelor of Science, Computer Science.

GRAPHICS COMPILERS PROGRAMMING-LANGUAGES

EXPERIENCE

2013 – Current **TheBrain Technologies**

C# XAMARIN MACOS IOS UI UX EMBER.JS JAVASCRIPT CSS GIT JIRA

Senior Software Engineer

Built main UI control from scratch in a cross platform manner—Mac, Windows, iOS, Android.

- Thin, custom, native graphics wrappers for each platform with shared core C# animation/interaction code.
- Implicitly-animated control allows visualization and touch- and mouse-based navigation of massive data sets.
- Endless UI/UX polish, bug-fixing, tweaking and iteration to respond to feedback and delight our users.

Front-end JavaScript work:

- Rich-text notes editor integration for custom interactive spell check. Easy, beautiful notes with clean markup.
- Ember.js code overhaul and web client redesign, inspired by desktop product but with its own design language.

2012 – 2013 **DreamWorks Animation SKG**

PYTHON PYQT GUI

Software Engineer

Worked on GUI tools for artists and animators to hand off work between departments in the production pipeline.

- GUI improvements for various Python/PyQT tools.
- Integrated automatic Maya crash report logging to help technical directors fix buggy plugins for artists on their teams. Crash reports are sent to a mailing list for component developers to review recurrent issues.

2010 – 2012 **Oblong Industries, Inc. / oblong.com**

Software Engineer

C++ GUI OPENGL LINUX COCOA OBJECTIVE-C WIN32 NETWORKING VIDEO GIT

Developed software to allow g-speak users (for a next-gen UI platform for gestural real-space computing, à la the film *Minority Report*) to "reach through" and use Windows and Mac applications.

- Designed, built, documented and polished simple-to-use multi-threaded, multi-process Mac and Windows UI. Integrated it into Mezzanine, our conference room product. Users can connect and share their screen, allowing any user in the room to control any laptop with a 6 DoF gestural wand or web interface. In a larger team including several QA testers, wrote specification documents, tracked and closed bugs, and submitted merge requests.
- Significantly improved reliability of asynchronous queued event messaging stack to deal with network disconnects and timeouts. Reused this component in UI app and in room-to-room communication stack.
- Map tiling: designed and built a multi-threaded OpenGL UI component and matching server component for Google Maps-compatible tiles. Used in mission control centers with three HD screens via 6 DoF wand.

2005 – 2010 **Doheny Eye Institute / USC Keck School of Medicine**

Research Engineer / Programmer

C# WINFORMS GUI C++ GRAPHICS IMAGE-PROCESSING HTML JAVASCRIPT

Built end-user applications used by algorithm researchers, clinicians and clinical trials for quantitative diagnosis of retinal images.

- Designed, implemented, extended, documented, and QA'ed two generations of end-user application (60,000+ LOC). Users can convert various vendors' native file formats, browse tens of thousands of files, navigate large data sets (50 megapixel), draw on images using custom UI controls and extract metrics as an XML or PDF report.
- Research and design of gestural 2D vector-based annotation software – easy-to-learn gestures, only one "mode". Extensive randomized testing. Found that deceptively intuitive concepts can have very hairy implementations.