

Rolf Hendriks

E-mail: [rolf@rolfhendriks.net](mailto:rolf@rolfhendriks.net)

Web: [www.rolfhendriks.net](http://www.rolfhendriks.net)

## SUMMARY

- **Clients + Employers:** TMSoft, Blackboard, Sylvan, PointAbout, Naughty Dog, iWin, Micros
- **Platforms:** iOS, Mac, Apple TV, Android, Windows, Xbox, Playstation
- **Languages:** Objective C, C++, C, Swift, Java, C#, HTML, CSS, SQL, JSON, XML
- **Frameworks:** UIKit, Core Graphics, Core Animation, Core Data, sqlite, OpenGL, OpenAL, .NET
- **Software:** XCode, Interface Builder, git, Android Studio, Illustrator, Photoshop, Visual Studio .NET
- **Knowledge:** mobile development, game development, user interface design, graphics and animation, web development, artificial intelligence, machine learning, cognitive psychology

## EMPLOYMENT HISTORY

### TMSoft

February 2016 - June 2017

#### Senior iOS Developer

*White Noise (iPhone, iPad, Mac, Apple TV), White Noise Baby (iPhone, iPad)*

- Redesigned White Noise for Apple TV
- Redesigned White Noise Baby for iOS
- Localized White Noise to Spanish and French, developed custom tools to share localizations across platforms and detect localization issues
- Added detailed voice over support to iOS White Noise and White Noise Baby
- Converted user interfaces to use Autolayout and dynamic text sizes
- Developed functionality for editing, sharing, exporting, and importing custom sound mixes
- Created sound generators for user generated binaural beats and tones
- Implemented sound searching on iOS and Mac

### Blackboard

August 2013 - February 2016

#### iOS Engineer

*Mobile Learn (iPhone + iPad), Bb Student (iPhone), Bb Grader (iPad)*

- Initiated a company-wide reusable framework for custom UI components and animations
- Introduced accessibility standards including dynamic text and voice over testing
- Innovated a data abstraction layer with mock data and simulated network conditions
- Prototyped an innovative JSON based client/server architecture that ensures a fast user experience against a slow backend while solving offline mode and error handling
- Developed liquid-like animation effects by combining 3D mesh transformations, cubic Bezier splines, and harmonic oscillation physics
- Learned Android, ported key features of the iOS liquid animation system to Android
- Discovered and documented over 500 issues across products by proactively gaining deep product knowledge and developing extensive test data
- Created robust file management capabilities to download and view at least 23 different document and media types while addressing caching, offline mode, and interrupted downloads

### Sylvan Learning

September 2010 - June 2012

#### iPad Designer and Developer

*SylvanSync (iPad)*

- Designed, developed, and architected SylvanSync, an iPad app that replaces paper based student-teacher instruction with iPad-based instruction
- Proactively visited learning centers to interview teachers and center administrators prior to design and development
- Designed the layout, flow, and graphic style of each app module and produced a significant portion of required graphic assets
- Designed, implemented, and documented a RESTful JSON based web service architecture for the iPad to exchange data with with .NET based center servers
- Created a simulated data server on the iPad to enable testing with mock data
- Developed a Bezier Spline based curve fitting algorithm so that teachers and students can annotate HTML based lesson contents with smooth, realistic handwriting
- Innovated a custom gesture based grading mechanism by which answers are embedded into lessons yet only teachers can access grading and answers
- Invented a scroll bar with built in support for left handed users
- Created and maintained an online project knowledge base while authoring 196 pages of technical documentation

**Rolf Hendriks**

Web: [www.rolfhendriks.net](http://www.rolfhendriks.net)

E-mail: [rolf@rolfhendriks.net](mailto:rolf@rolfhendriks.net)

**PointAbout, Inc.**

**April 2010 - July 2010**

Mobile Software Engineer

- Created a fast multithreaded algorithm to import and update over 500MB of product data from an XML data feed into a Core Data repository
- Used Core Graphics, Core Animation, and Cocos2d to create various animated 3D user interfaces
- Built 25 custom user controls, transitions, special effects, animations, and animation curves

iOS Developer

**July 2009 - Present**

*MapTastic (iPad), ZipTunes (iPhone), Party Game Timer (iPhone)*

- Designed, developed, published, and maintained three independent App Store titles
- Created MapTastic, a highly rated competitive US Geography game for the iPad
- Created ZipTunes, an alternative to the iPod mp3 player app
- Created an extensive library of reusable custom controls, animations, and other utilities

## **OTHER EXPERIENCE**

- Developed cutting edge water splash effects for *Uncharted: Drake's Fortune*, an award winning Playstation game franchise
- Built a jigsaw puzzle partitioning algorithm and game prototype within a month as a research assignment for iWin, a leading PC game company
- Developed a big systems test in C# and .NET to simulate large volumes of customer transactions for MICROS systems
- Built a custom 3D game engine from scratch as part of a 3 person student project team

## **EDUCATION**

**Full Sail Real World Education**, Winter Park, FL

**June 2004**

Associate of Science in **Game Design and Development**

**Carnegie Mellon University**, Pittsburgh, PA

**May 2003**

Bachelor of Science in **Discrete Math and Logic**

Minor in **Computer Science**

See <http://www.rolfhendriks.net> for screenshots, videos, and more

See <http://www.github.com/RolfHendriks> for work samples