Ken Hornak

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OBJECTIVE

Programming or managing world-class software products.

SUMMARY

- 20+ years creating the best medical imaging and sync products.
- Energetic and highly motivated software engineer with the communications skills needed to work at all levels of the organization, with outside contractors, customers and multinational companies.
- Extensive C++, iOS/Cocoa/Objective-C and object-oriented design experience.
- Managed entire product life cycles, 4 other engineers.
- Exceptional UI and Mac and Windows cross platform skills.

SKILLS

C/C++/Objective C/C#; Xcode, Visual Studio; iOS, Cocoa, Win32, .NET, MFC, STL, Boost

EXPERIENCE

Senior Software Engineer, Relium, Inc., Ann Arbor, MI   2012-present

Weather and Wundermap apps   iPhone and iPad apps done for Weather Underground (www.wunderground.com)

- Extensive work with MapKit to display animated radar, webcams, photos and other weather layers along with annotations. Data is collected from various servers and rendered on the map.
- UI work involving various controls and settings including crowd source reporting.

Metaphor app   iPad app done for Metaphor (www.metaphor.com)

- Reworked graphics engine to handle large canvas space upon which graphics with various transforms can be placed.

Senior Software Engineer, Mark/Space, Inc., Los Gatos, CA   2005-2012

Missing Sync for Palm OS   Macintosh OS X shrink-wrap product which synchronizes data between a Mac and Palm OS based devices (Zire, LifeDrive, Treo, etc.) using Apple's Cocoa object-oriented framework.

- Wrote Palm conduit to transfer photos from Palm device to Mac.
- Wrote Setup Assistant feature to guide the user through software configuration.
- Handled localization of the software into French, German and Japanese.
- Led the transition to Intel-based Macintosh systems.

Mark/Space Notebook   Mac Cocoa application that syncs text, graphics and audio notes with Sync Services using Core Data for storage.

Missing Sync for Windows Mobile   Macintosh OS X shrink-wrap product which synchronizes data between a Mac and Microsoft Windows Mobile and PocketPC devices.

- Implemented photos, files and notes synchronizing plugins.

Missing Sync for iPhone   Macintosh OS X shrink-wrap product which adds features to desktop sync that Apple's solution doesn't provide.

- Imports visual voicemail for archiving and playback on Mac.
- Provides a visual ringtone creator using any non-DRMed audio file.
- Took over and shipped Migration Assistant which works with other products to help the user move data from old phots to iPhone.

Missing Sync for Sony PSP, Missing Sync for Symbian, Missing Sync for BlackBerry, Missing Sync for Palm Pre, Missing Sync for Android, SyncTogether   Macintosh OS X shrink-wrap products which synchronize data between a Mac and various devices.

- Implemented music, photos, files and notes synchronizing plugins.
- Built a sync engine to drive media sync with flexibility and the ability to preview prior to a sync. Ported the Objective-C based sync engine to C# for use in the Windows products.

KIN Media Sync   Macintosh OS X shrink-wrap product which synchronizes music, photos and video between a Mac and Microsoft's KIN phone.

- Rewrote the majority of our app's user interface to provide a richer experience for the user including a Cover Flow interface to show music artwork.

Motorola Media Link　Macintosh OS X shrink-wrap product which synchronizes music, photos and video between a Mac and Motorola devices.
- Implemented UI changes and features to client's specifications.
- Localized into 19 languages.

Head of R&D, MedImage, Inc., Ann Arbor, MI　1990-2005
DELTAmanager　Managed updates of this Mac and Windows medical imaging suite from design to end user.
- Migrated large code base from Mac OS 9 to X.
- Created a new image review window which used a modern architecture. It gave users a richer display of their data and could fuse (overlay) images from PET and CT modalities.
- Wrote user documentation, created DVD case packaging and Getting Started booklet.
- Created an innovative image window system based on XML templates to let users customize their viewing experience. Introduced new UI elements to provide an easy, but unobtrusive, way for users to manipulate images. Users hailed it more as a brand new program than as an upgrade.
- With each release we became better at producing each one, delivering eight substantial releases and sub-releases in under four years.

Galen　Teleradiology product which delivered an exceptional experience for on-call radiologists.
- Written using modern C++ frameworks on both Mac OS and Windows.
- UI was completely separate from the core code which was shared by both implementations.
- Abstracted the file system and graphics rendering used by the core code that worked very well.
- UI code was well factored from the back end so that implementing on one platform sped the implementation on the other.
- Retargeted for **mammography** working with an outside company, DBA Systems, on product specifications, beta testing, visiting beta sites, etc.
- Modified to function as a **CGI** so that images and reports could be viewed on the web.

Portal　Let physicians and technologists move images from hospital to home, hospital to hospital, etc.
- Used analog modems or TCP/IP networks.
- Worked closely with outside contractors to develop the Windows version of the same program and its subsequent revisions.

MedScan, *DICOMscan*　Interfaced with a medical film scanner to import film images into our system or transmit them via DICOM image protocol to other devices.

Other projects included:
- Moved products to the **PowerPC**-based Mac working closely with Apple and Metrowerks. Assisted with marketing efforts to ship two weeks after Apple's introduction. Implemented a demo version that was included on a CD shipped with all Power Macs.
- Worked on nuclear medicine review software fixing bugs, adding features and implementing a **"volume registration"** feature that allowed a user to transform and align a volume of data from one modality with a volume of data from another modality.
- Set up and configured full time ISDN (then T1) Internet connection, mail, web, ftp servers, etc. Specified and implemented source control systems and development procedures.
- Worked closely with a multi-national company, Siemens Gammasonics, writing translation code to convert their legacy file format into DICOM image format.

Other responsibilities included:
- mentoring and training entry-level developers
- assisting with sales calls
- attending and demonstrating at trade shows
- visiting customer sites
- assisting with installations
- interviewing and hiring engineers and testers
- participating in sales and marketing efforts and
- assisting with various production- and support-related issues.

Software Engineer, Irwin Magnetics, Ann Arbor, MI　1989-1990
EzTape　Maintained old code, wrote new code, designed and implemented new tools for their Mac backup software. Worked on the Apple Unix (A/UX) version.

"The Wall"   User interface designer for a 35 tape drive duplication system.

E D U C A T I O N
University of Michigan   B.S. Computer Science, 1988
Chesaning Union High School   Valedictorian,