Thomas DiZoglio
tomdiz@yahoo.com

Objective
My objective is be a technical lead or manager of a mobile team. I want to be involved in coding and designing the application architecture for iOS and Android. I can be hands on or just Manage a team of mobile Engineers.

Education:
Boston University. Bachelor of Arts in Computer Science May 1988

Languages and Tools:
Swift,Objective-C;Java;Kotlin;C;C++;Python;PHP; Ruby/RAILs;Unix shell scripts;x86-ARM Assembly;Github;BitBucket;Codemagic/Github Actions CI/CD;XCode;Android Studio;Firebase;Datadog

Links:
https://github.com/tomdiz
https://www.linkedin.com/in/tomdiz
https://virgilsoftware.com/

Operating Systems:
iOS;Android;MacOSX;MS Windows;Linux (Most Distros)

Other Achievements:
Inventor on U.S. Patent Application Serial No.: 09/644,351
Entitled: “Integration Of Passive Data Content In A Multimedia-Controlled Environment”

Inventor on U.S. Patent Application Serial No.: 09/644,345
Entitled: “Method and Device with DVD and HTML Control”

Epicore Biosystems, Inc Author: https://www.nature.com/articles/s41746-025-01466-9

Work Experience:

Senior Software Developer Virgil Software LLC. November 2022 - Present
Self employed developing Mobile Applications for clients and myself; I build Mobile and the cloud server side API’s to support them; I developed Doublets word game for iOS and Android;

Director of Mobile Application Development Epicore Biosystems, Inc. February 2022- Present
Developed SwiftUI application that interfaces with the Epicore Connected Hydration device using bluetooth; This application is available in the Apple Store for download; Developed Android application using Jetpack Compose that will connect to CH device over bluetooth; Used Jetpack Compose and Cross platform frameworks with Android Studio to build a engineering version of our CH application for iOS and Android; Implemented React Native version for proof of concept before deciding to use Compose for cross platform; Wrote iOS and Android unit tests that are integrated into our CI/CDC; Setup Github Actions CI/CD for testing and application releases; Worked with QA Testing engineer to integrate Appium2 support into our CI/CD; Created Claude plugin with commands to process Datadog RUM reports to help FieldApps team could track down user issues and fix them; Worked with designers to create Figma boards that the MCP that could easily be used with my Claude sessions for SwiftUI/Compose development;Created Multi-Agent Orchestration with MCP’s using scheduled tasks for monitoring Firebase and Datadog error logs then fixing crashes for both iOS/Android projects; Jira MCP integration to create development tickets from Confluence documents for API and hydration logic design

Mobile Team Manager Zillion Group, Inc. February 2017 - November 2022
Leading a mobile team of 4 iOS and Android software engineers and 2 QA engineers; Scrum manager for

team using agile development practices; Team works on the Zillion wellness platform for mobile applications that includes Real Appeal and Restore Health; Work with management to create applications and mobile features; Zillion wellness platform contains real-time WebRTC that allows coaches to run group meetings of up to 50 users on mobile devices; Applications support various Health/Fitness tracking using third party devices throughout Apple HealthKit and GoogleFit; Worked with RAILs team to architect API's that support mobile devices; Architect the iOS/Android mobile applications to support the future growth that management is looking to implement; I also develop on the iOS/Android applications using objective-c/Swift and Java/Kotlin; Android GUI development was done using AndroidX/Jetpack Compose; IOS GUI development using Swift and SwiftUI; My time split is 40% management and 60% development; Tracking issues using Mixpanel and Crashlytics to provide the best user experience; My first 3 years at Zillion I was the full time manager for a team of 14 iOS/Android mobile engineers; I worked with Engineers to move our mobile applications to Swift/Kotlin using MVVM and GraphQL; Did cross-platform views using React Native for coach lessons

Sr Software Engineer Axon Communication, Inc. March 2016 - February 2017
Designed and Developed enterprise communications platform for pharmaceutical companies that runs on iPad/iPhone and website. iPhone/iPad enterprise application was written in Swift 2 using the OpenTok framework; The back-end I developed in PHP running on Hedoku; The website also ran on Hedoku as a separate application; Developed website using Bootstrap, JQuery, Javascript and HTML;

Lead iOS Engineer Partender, Inc. August 2014 - March 2016
Worked on iOS Partender Application; Only iOS engineer on project; Redesigned application architecture to use multiple context core data for offline usage and background syncing; Moved to storyboards from nibs to support adaptive layout for universal support;

Senior Software Engineer Virgil Software (Self Employed) 1986 - July 2015

Projects I worked on:

Theo, September 2013-July 2014
Worked on myTheo Professional (iPad), TheoTour (iOS-Android), Theo-MLS (iPhone); Worked on RAILS backend adding REST API to support clients; Managing move from Cloudant (PHP) processes to AWS-VPC EC2 instances running load balancing and multiple API servers running Nginx/Passenger/RAILS; Worked on Chefs scripts to rebuild servers;Capistrano scripts for deployment;DevOps of backend;S3 image support (CDN) and RDS database;Updated using Sync server written in RAILS; myTheo Professional iPad application was initially done overseas and I rewrote it to use core data, GDC dispatching and iOS 7 GUI; I am the head engineer that manages contractor schedules, design, development (including code reviews) and talk with potential angel investors and VC's; Integrated MixPanel and Crashlytics;Unit testing using Kiwi and KIF;

78x36 Productions - November 2012 - 2019
I'm the only developer of the iOS application called MTQ (Mind the Queue); I have worked on this project for over a year now providing all development and dev-ops efforts;Using MapKit, City Grid API, Food Truck API and Google Places API to show businesses around a users location; iOS 7 custom GUI design that was implemented; Developed backend in Ruby on Rails using HTTP-CRUD with PostGIS DB to provide users with business details, wait times and allow user tracking/login; Developed using Storyboard and ARC; Developing and up keep of Ubuntu AWS EC instance for backend; Used ActiveAdmin GEM for backend administration; Made top 12 productivity application in AppStore; Integrated Flurry, Placed and TestFlight API's;Handle Dev-Ops on backend keeping servers updated and prevent hacking; Worked with designers for artwork and iOS design limitations;

Vyew - October 2013 - June 2015
ArborPlus - iOS Application
Initial development of first version; Used Core Data with multiple contexts that supports background networking and syncing code using dispatches; MapKit integration for annotating tree locations; Drop down menus from UITextFields for selecting core data values for entities; Developed GUI using storyboards and populated data using NSFetchControllers; Integrated TestFlight for releases and bug fixing;

StudyBuddy - iOS Application
Fixed over-seas development of initial code so that it works for iOS iPhone; Fixed code so works on iOS 6.1 - 7 doing a universal storyboard rewrite of the application; Wrote server code to use dispatches and caching to make user experience better; Used SDWebImage for image caching; Worked on Vyew and Vyew StudyBuddy versions of the application; This company gave me rave reviews for my work (fast and excellent coding) and is currently getting me more work because of that; Integrated TestFlight for releases and bug fixing;

Tiny Mobile – July 2013 - August 2014
Ported iOS cocos2d game to Android; Ace SlotGame that supports GooglePlay with In-App purchases; Amazon Store with In-App purchases; Developed method to support all device resolutions;

Vidal Development Group - November 2011 - August 2014
Developer on Android and iOS application NDT; Worked on GUI interface bugs for both applications; Developed iPad training application for Abbott Pharmaceuticals; Developed Objective-c based application using UIWebview for HTML5 content and UIViewController with AVPlayer for Quicktime movies and playing sound files (AIFF/MP3) with a movie or HTML5 content; Added support for PDF document viewing by customizing the PSPDFKit Library; Developed the custom interface to move around the PDF document pages that the Art and UI Designers envisioned; The UIWebview had JavaScript hooks to pass commands to the objective-c code to control the audio player and linking to movies in other views; The QuickTime movies had an embedded text track that was used to place hotspots over the video that allowed the user to jump around the various tracks and using timeObserver's with code blocks to move around as well; Added support for text track larger than 32K by using external files; Using analyze and leaks to remove almost all bugs;

IMVirtual, August 2013-November 2013
Worked on meetingQ for iOS; A Meeting recording application; I worked on core data, microphone recording of large files, GUI features, network synchronization, iOS 7 GUI updates and support; Worked with 2 other iOS engineers, including the CTO; Backend written in PHP by another engineer; Worked with layered PSD files and integrated artwork into custom GUI controls designed by graphic artists;

Fingerprint Play – June 2012 - July 2013
Worked on Fingerprint Android SDK – Added features and bugfixes;Worked on MacOSX command line tool to convert GTL files (independent contractor tool PVR file format) to PNG files; allowed customer to re-create artwork texture files used in previous iOS projects; Working on Android Fingerprint SDK; Made video playback to separate Activity to support landscape only and return to UIWebview when complete; Added support for evaluating Javascript using keyboard events instead of loadURL() because closed soft keyboard when called; Other fixes and features to help release project;

PlayHaven August 2011-Aug 15, 2012
Developer on iOS SDK and Android SDK teams; SDK is a cross-platform marketing tool that is made up of several parts; The local SDK written in native code and the content-templates written in Java script; The content-templates are based on the server and pre-fetched to the devices at run-time; They are used to show marketing promotions to users in a game;

Retronyms. July 2010 – July 2011
Developer on Verizon's VCAST Windows media organizer/backup/player application for cellphones; Built using wxWidgets and MFC from merging two separate applications written in C++; Worked on port of Re-Birth for iPad; , programmed in Obj-C and C++; Worked on GUI using Interface builder, added multi-touch ability to GUI, added support for accessing RBS file data quickly to support new iPad GUI features; Worked on new version of AstoundStereo Expander; Changed current copy protection libraries from Software Passport to Derman Enterprises Added new GUI features using JUCE and updating NSIS installer scripts; Worked on consumer image processing application called Snap! (snapstrip.com); Added Intel AppUp support and updated application GUI to run on Intel Netbooks; MSI install package; Developed Snap! For Windows and Macintosh OSX using the cross-platform JUCE framework; Accelerated Image processing using Intel Performance Primitives (Mac/Win) and MacOSX Accelerate Framework (vImage/vDSP);

Developed a C++ cross-platform Facebook GraphAPI library for Mac/Win; Developed multi-threaded python script for load testing Openbucks LAMP servers; Ported Openbucks.com PHP-based example for client backend server integration with openbucks.com server to Ruby on Rails; Developing with 2 other engineers an open source cross-platform audio library; Supports iOS, MacOSX, Windows(XP/Vista/7), Windows 7 phone and Android; Supports MP3 and OGG

@WalmartLabs
Android kiosk application that runs on i-Display running OS 4.0.2; Contains multiple views that allows person in the toy section to browse online and in store toys selections. Wrote layout in XML using layered lists, drawable shapes and other components. All standard views where over written to create complex custom looking views; For example, used drawable shapes and layered-lists to create a TextView that looked integrated into graphics on screen. Wrote asynchronous networking code to download and cache in store toys nightly. This included images and toy details. Search for online toys happened at run time as user entered data; Integrated QRCodes using open source ZXING;

Loc8te
Developed location based advertisement system; Developed system to build profile of a user using location based information; Technical lead in developing the Loc8te client side iOS and Android SDK; Developed a web based view in the SDK to show different affiliate deals to users based on profile built; Allowed backend to change deals based on user device profile; Designed content-templates to do this using 1 HTML/CSS/JS contractor; Backend returned JSON to dynamically generate UIWebviews; Developed backend using Rails with 1 contractor under my supervision; Used Rails gems-Sorcery for server login, Sun-Spot for SOLR integration, Paperclip for S3 static content delivery of content templates; Rails used token-secret HexDigest for HTTP REST API security; Used Sharding of parameters to read/write to remote MySQL servers; Help design Pentaho ETL processes to clean and process data for running data analysts data models; Model DB was used in RAILS API to decide web views users would view;

Locaid
Developed mobile Android Application that reports a phones location using GPS/Wifi/aGPS;Reported to server using config information; Server could update config values remotely to conserve battery life depending on users usage patterns;Used HTTP REST protocol;Responded with JSON for configurations;

RadiumOne
Developer on iPhone social media application Via.me; Worked on custom tableview cells for presenting user posts and followers; Worked on the facebook, twitter and Via.me application integration for logging in, posting images to your walls, commenting/tag and pict tweeting; Worked on camera views for taking pictures, applying filters and uploading to web; Developed the image processing engine to support the creation of image filters used by the user; Engine supported filter updating and adding over the internet; Created XML interface to the image processing engine allowing a graphic designer to create filters using photoshop and actions, then translating to XML; Used Accelerate framework (vDSP and vImage) to increase filter rendering speeds;

Workshare
Developing iOS application that supports Workshare's cloud software named Catalyst; This software allows file/folder synching with the server; It also allows document comparison between file versions and different types of files; It allows users to share documents and collaborate creating documents; Used ASI-HTTP and JBJSON for communicating with the IIs web services written in C++; Designed and developed GUI for the iPhone and iPad versions; Used dynamic GUI elements and Interface builder; Setup Hudson to use XCode and Microsoft TFS for continuous integrations; Integrated successful build/tests to upload to testflight for testers;

Mothership Interactive
Worked on Facebook game called Rune's of Magic; developed using PHP using the Kohana framework under LAMP; used phpMyAdmin and MySQL tools for database changes; Added new screens and DB tables based on designers specifications; This included AJAX and javascript view coding changes; added Facebook Graph API and some FBML for making requests to users, notifying friends of achievements and profile integration;

Enmoda

Worked on enmoda.net Blackberry secure email application using JDE 1.4;Developed iPhone application called SuperVex;Developed a native iPhone Solitaire game using XCode with the ARM Toolchain and the iPhone UIKit framework;Worked on proof of concept application to show the iPhone could get 12 fps video using the built-in camera;Developed product for Palm OS called GPSNotify using Code Warrior IDE for Windows (C/C++);GPSNotify worked on Garmin iQue 3600 devices, when it found the specified GPS location (using fuzzy logic algorithm) defined in a tab delimited text file generated from Excel spread sheet, it sent a notification to Pocket Tunes to play an MP3 sound file;Founded and Hosted San Francisco Linux User Group website (www.sf-lug.org) using Apache and mailing list using Mailman from 2002-2004;Designed and developed open source J2ME application called TrafficWatch that uses KSoap/kXML and interfaces with an Axis Web Service to display traffic camera images;Implemented MilDOT Pro sniper software for Windows using a customized UI with owner draw controls and printing of output data onto labels;Used super classing and sub classing for user defined controls;Designed, implemented and tested Aicon Wake On Wireless LAN for detecting 802.11x networks on PocketPC;App consisted of 4 components: EXE, COM object, Control Panel Applet and NDIS 4 device driver;Scans for open BSSID's, joins the Access Point (after user notification) and launches user defined applications once a connection is made;Supported OID 802.11 codes under NDIS 5.1 and used a NDIS driver to support the PRISM chipset OID\RID codes for NDIS 4 on WinCE 3.x and PPC 2002/3;Developed C++ Internet Explorer COM add-in to kill pop-up window advertisements;Developed Windows version of Gnutella under GPL;