Bill Vivino

Software Developer

billvivino@gmail.com
http://www.github.com/billvivino
https://billvivino.github.io

ABOUT

I currently work as a contract/freelance iOS developer for Upwork clients and a Unity/C# developer for an app for the NASA visitor center. I have four apps published on the App Store. In addition, I co-founded an iOS game startup company with one of my clients and code software under contract for many others. I am also in various consulting roles, helping develop iOS applications for small-sized firms and bringing multiple apps live on the App Store. Lastly, I work with youth as a general music teacher in a public school.

I have a B.S. in computer science from Rutgers University in 2004. After a long hiatus from coding, I returned as a contract/freelance software developer. I began my return by developing an app for craft beer lovers and creating a port of a Unity LEGO game from PC to iOS. These projects, in turn, led to completing iOS apps for multiple Upwork clients. My experience developing Unity/C# games for other clients and my iOS games helped lead to my current role with AMC/NASA. My future goal is to continue to expand my horizons, "making things work."

EXPERIENCE

All-Star Sports, Eureka Canvas - Sports Edition App   *- Lead/Sole iOS Developer*
JAN 2022 - PRESENT
- Free Beta Demo Version (for technical recruiters/interviewers): https://testflight.apple.com/join/TecTkmto
- Official App Store Release: https://apps.apple.com/us/app/eureka-canvas-sports-edition/id1643624044
- Developed a sports video markup app for a sports coach client.
- Integrated body position analysis code from Apple's 2020 WWDC Vision example.
- Full video scrolling/slider/ +/-5, play/pause, ⅛, ¼, ½, 1x, 2x buttons implemented.
- PencilKit API.
- StoreKit API for the app subscription.
- Custom shapes, arrows, and sports markup features.
- Ability to save and load canvases and game scenes.
- Use of trigonometry functions to calculate vector angles for shooting balls.
- Future updates will use Apple's Vision API to track the ball's path from video analysis.

WeatherSats AR, NASA/Andrew Morgan Consulting *- Unity/C# Developer*

MAY 2022 - PRESENT

- You can download this app (for free) on the App Store at the following URL:
  https://apps.apple.com/us/app/nasa-weathersats-ar/id6444034201
- Google Play Store link:
  https://play.google.com/store/apps/details?id=com.JPSS.WeatherSatsAR&hl=en_US&gl=U
  S
- Added the AR models to the app and coded object manipulation scripts.
- Added and enhanced the AR features
- Built UI and UI behavior for the AR side of the app. (App has both AR and 3-D sections)
- Added additional UI features.
- Bug-fixed the AR and 3D systems and scene loader.
- PlasticSCM source control and Azure DevOps.
- Provided video updates to NASA on app development progress.
- Prepared and delivered the app to NASA for publishing on the Google Play Store and App
  Store.
- Phase II will be adding audio overlays and an audio guide-through of the app.
- App will become an exhibit at Goddard Space Flight Center in Maryland.

Pioneer Mobile Applications   *- iOS/Android Developer*

JAN 2023 - PRESENT

- TradePit-iOS
  - Made various updates to the UI and push notifications.
    - Implemented "sort by newest item" feature
    - Bottom sheet picker for users to select the state they live in.
    - Disable banner and sound push notifications when in the middle of a text
      message thread with another user.
    - UI enhancements.
    - Installation of Crashlytics
- LottoLytics (iOS/Android)
  - Implemented a bottom picker that shows lottery games available in each state.
    Saves the user's last selected state choice in user defaults. iOS and Android app
    versions.
- Rapid Response (iOS)
  - Implemented a settings controller that accesses UserDefaults to save app
    settings.

Co-founder, SoulandForm, LLC (https://soulandform.com/**)** *- Sole iOS Developer*

JAN 2022 - PRESENT

- You can download this app on the App Store at the following URL:
  https://apps.apple.com/us/app/soul-and form/id1633902006
- Built a SwiftUI-based animation video game with a Firebase backend for an Upwork client
  from scratch. This contract turned into a business partnership.

- I coded the app from scratch using SwiftUI and Firebase.
- Responsible for all UI and backend calls and Firebase security rules.
- Coded StoreKit functionality for in-app purchase subscriptions.
- Gameplay - players draw animations and challenge other players to find the "link" or "rule" between the animations.

SimFit App   *- Lead iOS/WatchOS Developer*

AUG 2022 - PRESENT

- Lead developer on a workout-tracking WatchOS app that links the user's progress to video game play on a linked iOS device.
- Public beta link (TestFlight): https://testflight.apple.com/join/3eZdEsUQ
- Responsible for developing the user interface behavior using SwiftUI.
- Development of the backend communication and database structure using Firebase. Created view controllers and leveraged a database manager I created for my other applications (Craft - the Social Beer App and SoulandForm) to create an auth and data system for user profiles in this app.
- Use of HealthKit, WatchKit, and WatchConnectivity to link the WatchOS app to the main app.
- User records workout data on the watch app which is sent via WatchConnectivity messaging to change the speed of the player in real-time in the video game, which I also created. (It is a simple racing game.)

PlanetXR (https://www.planetxr.net/) *- Lead iOS Developer*

AUG 2022 - PRESENT

- https://apps.apple.com/us/app/planet-xr-1-spatial-ar-world/id1605504634
- Created a transparent tutorial video overlay on the main app screen.
- Timed UI text to coordinate with the transparent video.
- Used the view alpha channel to fade the tutorial and text in and out for a cinematic effect.
- Coded app logic to display the tutorial only in applicable scenarios.
- Updated the Google Maps view to display simultaneously with the AR camera in the bottom third of the screen to enhance the user's ability to find objects in the AR world while navigating in AR.
- Updated the map view system to include AR models and AR "air messages" based on their thumbnail or text data.
- Enabled map view for all users, not just developers, in debug mode.
- Use of Jira system for software project management

Craft - the Social Beer App *- Sole iOS Developer*

JAN 2019 - PRESENT

- Founder of a Craft Beer social media startup with my brothers.
- Beta link: https://testflight.apple.com/join/oD1kIq3s

- App began as an extension of the MessageKit API, which allowed users to send messages and save their profiles. Created 2019-2020. Original version based on UIKit framework.
- I used Firebase SDK for app user data, beer data, brewery data, beer cellar data, message data, and user authorization.
- Custom emoji actions developed.
- Developed Firebase functions written in Typescript/Node.js to make periodic updates to the data structures in the database.
- Creation of backend Firebase functions (Typescript/Node.js) to calculate crowdsourced beer ratings, updated after each user enters a new rating.

Upwork - *Freelance iOS Developer/Freelance Unity Developer*

JAN 2022 - PRESENT

- *TrackHero (https://trackhero.com/), iOS Consultant*
  - Served as a consultant to help the client make API calls using Combine.
  - Implementation of the Stripe Purchase API
  - Helped solve issues with concurrency, loading data models, and SwiftUI view management.
- *Arrows Video Game, Sole Unity Developer*
  - A Unity/C# WebGL third-person shooter game for a client called "Arrows."
  - https://play.unity.com/mg/other/webgl-builds-154388
- *LEGO Sky Island Escape (Unity Port)*
  - I made a port of a Unity-based LEGO game to iOS.
  - I coded the user control logic and combined pre-built game levels, customizing some of the game levels.
  - Public beta is open through TestFlight here: https://testflight.apple.com/join/BDWu8n5P.

OTHER EMPLOYMENT

Music Educator, Sept 2007 - Present

- Pequannock Board of Education/Pequannock, NJ
- Full-time elementary school general music teacher in the Pequannock school district.
- Band director, choir director

Bandleader, Hank Lane Music - Feb 2012 - Jan 2022

- Led a full-service wedding band for a leading entertainment company.
- Master of ceremonies, musical director, and client liaison for over 50 wedding events per year during my tenure.

SKILLS/FRAMEWORKS/LIBRARIES

- Swift
- C#
- JavaScript/TypeScript
- Node.js

- Objective-C
- WatchKit
- HealthKit
- WatchConnectivity
- SwiftUI
- UIKit
- Unity
- Firebase
- Firebase Functions
- StoreKit
- AVKit
- MessageKit
- MapKit
- PencilKit
- React
- Bootstrap
- CSS
- HTML
- Game Development

EDUCATION

Rutgers University, New Brunswick, NJ *- Bachelor of Science, Computer Science, Bachelor of Arts, Music*

SEPT 2000 - MAY 2004

- Graduation from the Honors Program
- 4.0 GPA In Computer Science courses

CERTIFICATIONS

Introduction to Front-End Development, *Coursera*

AUG 2022

- Credential ID:WQ3JRSV5GD8G
- Credential URL: https://www.coursera.org/account/accomplishments/certificate/WQ3JRSV5GD8G

Unity Essentials Pathway, *Unity Technologies*

JAN 2021

- Credential URL: https://www.credly.com/badges/ab4e6d89-f757-443b-988e-583492d9dac4

AWARDS

- 772 Coding Score, CodeSignal
- CodeSignal, Level 42
- Linkedin Swift Badge

PORTFOLIO

- **Eureka Canvas (SwiftUI/Swift/StoreKit):**
  - Demo: https://testflight.apple.com/join/TecTkmto
- **WeatherSats AR (NASA)**
  - App Store: https://apps.apple.com/us/app/nasa-weathersats-ar/id6444034201
  - Google Play Store: https://play.google.com/store/apps/details?id=com.JPSS.WeatherSatsAR&hl=en_US&gl=US
- **SoulandForm (SwiftUI/Swift/StoreKit/Firebase):**
  - https://apps.apple.com/us/app/soul-and-form/id1633902006
- **SimFit** (https://testflight.apple.com/join/3eZdEsUQ)
- **PlanetX AR** (https://www.planetxr.net/)
- **Craft** - **the Social Beer App (UIKit/Swift/Firebase):**
  - Overhaul link: https://testflight.apple.com/join/oD1kIq3s
  - UIKit original: https://testflight.apple.com/join/qx30hlwj
- **LEGO Sky Island Escape (iOS/Unity/C#):**
  - https://testflight.apple.com/join/BDWu8n5P
- **Arrows (Unity/C#/WebGL):**
  - https://play.unity.com/mg/other/webgl-builds-154388