## Tyson Frederick - Android, Unity3D, Ruby, Adobe Master Suite

I am a software developer in mobile (Android), web (HTML5/Ruby), and gaming (Unity 3D, Unreal Engine 4, and Gamemaker). I take pride in being a hybrid software engineer/creative artist. Both fields are essential to the self and completing a project, though opposing in theory. I am eager to advance my career in the San Francisco region with an employer involved in mobile, education, gaming, computer vision, and/or knowledge/information. I received my Master of Fine Arts in Digital Media/Art in Technology & Media at San Jose State University, May 2014. I have developed the following applications, most documented in detail with screenshots and Github links at <a href="https://www.tysonfrederick.com">www.tysonfrederick.com</a>:

Java/XML - Android Studio - Sunshine Weather Deep Blue and Light Green (on Google Play Store and Github; see my portfolio), Firebase Realtime Chat App, Firebase Review App, Google Maps API and StreetView Apps, Udacity Toy Apps, etc.; implementations include third-party REST-ful JSON API interaction, list and detail views with fragments (RecyclerView with Adapter and data binding), Android 5.0 design, preferences and extras, explicit and implicit intents to native components and Google APIs (Google Maps), the application lifecycle, manifest/gradle files/min sdk targeting, SQLite and noSQL local database storage, push notifications, etc. All apps are documented in detail with screenshots and Github links at www.tysonfrederick.com.

**Objective-C** - Native iOS Applications: A two and three card/deck, object-oriented, "matching" game: MVC w/ pointers, getters and setters, and storyboards. I am self-taught thru open online Stanford course cs193p.

**Ruby on Rails** - A client/server side, social media, Twitter-like, web application using Ruby, Linux, Git (hub) VCS, MVC development structure, REST, LESS/SASS/SCSS formatting via Bootstrap 3 layout/ formatting/grid system/fragmentation/views. Features include (un)following, refactoring, AJAX, string and ID storage in relational databases with SQLite3 and PostgreSQL, 220 character posts, and secure authentication of user/admin. Developed on Linux/Ubuntu LTS 12.04 with Sublime Text 3.

**FoodShare Mobile and Web Platform** - Geo-locative services and tracking platform bringing unused food to those in need; doing all aspects of product, design, and development from idea to MVP to version 1.0, which includes progress in UI design and Android development. The current website can be found at <a href="https://www.foodshare.co">www.foodshare.co</a>. See the detailed FoodShare page at <a href="https://www.tysonfrederick.com">www.tysonfrederick.com</a>.

**Unity3D/UE4** - Games/Simulations in Unity 3D, Unreal Engine 4, Source SDK, Second Life, and Gamemaker. This includes components, game objects, 2d/3d modes, colliders, lighting, rigidbodies, parents/children, and scripting. C#: physics, player, pickup scripts.

**Java/AS3 - Processing 2.0/Adobe Flash 6** - Over 50 "sketches" consisting of digital videos and programs made through data visualization and computer vision/interaction. implements classes, libraries, importing data files for arrays, storage, and drawing x, y coordinated polygons, lines, points, etc. Fine art practice consists of ActionScript 3.0 and the processing.org java-based language. Work is digital image, video, web app or executable. See my developer portfolio: <a href="https://www.tysonfrederick.com">www.tysonfrederick.com</a>.

I've been an Associate Professor in Art 74: Introduction to Digital Media (online) at SJSU. The curriculum was Adobe CS6 Photoshop, Illustrator, basic HTML, Dreamweaver, an intro to Flash (AS3), Processing, and WordPress. I've held eight exhibitions in well-known public galleries/spaces. My digital, algorithmic, and interactive works consist of Unity 3d, Flash, Processing, Ableton Live 9.0, MAX/MSP, and Microsoft Kinect (computer vision). I am a member of Phi Kappa Phi, an honorary academic society, and have worked multiple, graduate-level, academic jobs in IT.

I am passionate and challenge problems. I constantly research and learn as an avid technologist, self-teacher, and collegiate-level educator in digital media. My interests include outdoor sports, social gatherings, gaming, research, reading, and exploring the Internet.