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July 2019
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Mobile & Web Developer and Designer, Educator and Digital Artist

I am both a developer and an artist. I really enjoy programming mobile apps for Android (several in iOS); as well, I've had interest in web apps using Ruby on Rails/HTML5 and mobile/desktop gaming with game engines like Unreal Engine 4 and Unity3d. I am eager to advance my career in the San Francisco region with an employer involved in mobile, education, computer vision and/or knowledge/information. I received my Masters of Fine Arts in Digital Media/Art and Technology at San Jose State University in 2014. Since that time, I have continued my education and expanded my knowledge of software development on my own, while doing consulting and contract work in the software development field and care-taking for my father in Tahoe. I am now looking forward to continuing my professional career - hopefully as an integral member of a dynamic team!

DEVELOPER AND DESIGNER EXPERIENCE

Java & XML Design and Development for Android:

10/14 - Present

Learning Resources: Developing Android Apps(2x enrollment (Udacity)), Firebase in a Weekend (Android) (Udacity), Cave of Programming: Java Tutorial for Complete Beginners (Udemy), Google Firebase and Firestore Codelab, Google Maps (Udacity), Android Application Development 4 by Reto Meier and Android Programming: The Big Nerd Ranch Guide (2nd Ed.). **Apps Built:** Sunshine Weather Deep Blue and Light Green (on Google Play Store), Firebase Realtime Chat App, Firebase Review App, Google Maps API and StreetView Apps, Udacity Toy Apps, etc.. **Concepts Used:** Implementations and functionality include REST-ful API interaction, list and detail views with fragments and custom png files, Android 5.0 design (multi-resolution and form factor), settings and preferences, intents to native components and Google APIs (Google Maps), the application lifecycle, formatting and parsing JSON queries, manifest files, SQLite local database storage, Material Design action bar, and push notifications. I have used 3rd party APIs with JSON (Github and OpenWeatherMap), RecyclerView, Intents, Lifecycle, Preferences, Content Providers, Components, Background/Async Tasks, Multi Device Layouts & Material Design UI. For details, please visit my portfolio at www.tysonfrederick.com.

FoodShare Mobile and Web Platform - Product, Design and Development:

1/15 - 1/18

Developing 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. The current website is www.foodshare.co. FoodShare is coming to Kickstarter, the draft can be found at www.tysonfrederick.com.

Mobile, Web, and Game UX & UI Design:

2003 - Present

I have 15+ years student/academic experience with the full Adobe Creative Suite (currently at 5.5 & 6); Now using Sketch for UI and mockups. Created buttons, layouts, and color schemes with Photoshop in both UI design and fine art. Teaching of Art 74 in HTML, web development, and web layout. Vector images with Illustrator. Fireworks application-icon knowledge including PNG, JPEG, GIF, and TIFF files. Integration between Photoshop, Illustrator, and Bridge and Adobe Premier Pro and After Effects use, over 20 videos and 150 images published/completed during MFA. Use for all aspects of UI/UX integrating into HTML5, Ruby web application, Unity3d, Source SDK, GameMaker and WordPress, etc.

Ruby on Rails/HTML5 Web App Development:

6/13 - 4/14

I built a twitter like, web application, using Ruby on Rails, that is developed front-to-backend from a generalist perspective. It is taught through railstutorial.org (rails v 3.2 - ruby 1.9.3). The web app uses an MVC framework, OOP, REST, SCSS, SQLite3, postgresSQL, and the Bootstrap 3 HTML5 framework. The app contains microposts, friend (un)following with AJAX, instantiation of users, routing, FactoryGirl's mock-data population, error flashing and validations, pagination and partials. The application implements bcrypt authentication and security features, with tokens and md5 hashing for REST interaction signup, user-information updating, and admin privileges. It handles up to 50,000 users with a proper remote host; it is deployed to a test server on Heroku, as the web service is free for testing (slower-load times). Developed with test-driven-development (TDD) in RSpec. The app was made in Linux and OSX (sublime text 2, Xcode 4, and terminal). The HTML 5 has a fixed navbar bug, which hides the dropdown on certain mobile devices in landscape mode (have researched but yet to implement the solution). See lit-oasis-3495.herokuapp.com and www.github.com/tkinetik1/sample_app/; also available at www.tysonfrederick.com.

Mobile Development Lead Intern for ZERO1 App Lab Team:**4/12 - 8/12**

Lead project manager as graduate intern for ZERO1's mobile app lab and hack-a-thon. ZERO1 is a nonprofit Silicon Valley based digital media/art biennial. ZERO1's branding and mission statement is to be the hub where art and technology meet. I managed our core intern team of five in collaboration with one UI/UX designer, one iOS/android developer, and one back-end software engineer/principal as well as an oversight committee of mentors. Technically, I organized and made development/design choices and management on the first application models, provided data-entry through the project, and helped deploy relational database implementation through JSON and comma separated valuing. The application used a variety of native technologies that included social media, interactive drawing, text, the networking and displaying of attendees. It also consisted of digital visualization, geo-location, Google API mapping, storytelling, and community curating. The application is for both iPhone and Android. 2012.zero1biennial.org/app.

iOS Development:**5/13 - 11/13**

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 (Spring 2012). I have also developed a hello world! app and an app displaying input and output strings.

Gaming/Unity3D/Source SDK/Unreal Engine 4/Second Life:**2005 - Present**

Game and Simulation design and development for 8+ years including components, game objects, 2d and 3d modes, colliders, lighting, rigidbodies, parents/children, and C# scripting with physics, player, and pickup scripts. Unity scripts available at www.github.com/tkinetik1/Unity-Scripts/. Completed Art104: Game Design (Spring 2012) at SJSU and CS491: Colloquium in Serious Games at UNR (Spring 2007), which was sponsored by NASA and the US Military among others. Some game recordings available at www.youtube.com/tkinetik1.

WORK EXPERIENCE**Recent Web Projects:**

The Aubergine Door – Interior Design Company Website
JohnSkaggs.com – Artist Website and E-Commerce Store

2018 and 2019

www.auberginedoor.com
www.johnskaggs.com

Caregiver

Live-in caretaker for Parkinson's patient, 79 year old father.

Lake Tahoe, NV**4/16 – 9/18****DoorDash, Lyft, Postmates****Driver****San Jose, CA****1/15 - 5/16, 5/19 - 7/19****Tiffany East PR****Reno, NV****Governor's Global Tourism Summit App Developer/App Manager:****8/17 - 12/17, 8/18 - 11/18**

App Manager for the Nevada Governor's Global Tourism Summit. The 2 day conference is hosted in alternate years in Las Vegas and Reno with over 300 attendees, approximately 15 speakers, 15 sponsors, and 20+ exhibitors. I managed the CrowdCompass/Cvent mobile and web applications that hosted the main agenda, attendee, and sponsor informational content and designs. Standardizing logos, created splash screen and banners, made key choices in navigation icons and app UI colors/layout. I integrated design, content, and interactive features, as well as providing live technical support before and during the conference, and data content management with spreadsheets and dashboard.

Biofilm Inc.**Minden, NV****Concept Simulation and Video Production:****9/16 - 1/17**

Created a concept video for an industrial product, still in the R&D stages, to illustrate the function and effectiveness for potential investors. Using the Unreal Engine 4 game engine and Blender 3D modeling software and the Adobe Creative Suite, I constructed a virtual prototype through several iterations and formulated the narrative from the R&D specification sheets and product testing documents, incorporating purchased assets to enhance the viewer experience.

Lake Tahoe Community College**So Lake Tahoe, CA****Connect Facilitator: Youth STEM Camp and Intro to Computers and Smartphones****6/16 - 3/17**

Taught two community based courses at Lake Tahoe Community College. A two week STEM program, focused in software development/intro to programming with Raspberry Pis, Scratch MIT, and Python with twenty-eight

8-12 year old students, coordinated through the digital media department and the LTCC Connect program. Conducted a three week workshop, "Intro to computers and smartphones at LTCC", coordinated through the LTCC Connect program (community based classes not offered in their curriculum).

Vendus Labs

San Jose, CA

Consultant: Mobile and Web Design and Development

5/15 - 7/15

Helped in design and development phases for multiple projects on web and Android, consisting of MVP to pre-version 1.0 in both design and development. We used Sketch, Avocode, and Invision for product/UI/UX design of web and android app. Designer on social, geo-locative, consumer facing android app (40+ views UX, UI, and high fidelity prototype/mockups). Solved target and minimum SDK limitations with previous products, targeted and fixed view related bugs, and began migration of deprecated and legacy eclipse projects from their internationally remote developer team to Android Studio via GitHub.

San Jose State University

San Jose, CA

Teaching Associate: University Level - Art 74: Intro to Digital Media

1/13 - 5/13

Teaching Associate for Art 74: Introduction to Digital Media at San Jose State University, Fall 2012, with 14 enrolled students in a primarily online class via webcam and the SJSU learning management system. Art 74's concepts include Adobe CS6 Photoshop, basic HTML (hand-coding), CS6 Dreamweaver, and Second Life/Gamemaker. Each student generated a web portfolio and documentary, which included their work throughout the class. WordPress and Gamemaker were also introduced.

Academic Technology Success Center Assistant

8/11 - 6/13

Technical support to faculty and students of SJSU with new academic technologies including the LMS, smart boards, projectors, a computer console/panel, maintenance of 25 PCs and 20 MACs with DeepFreeze and the Adobe Master Suite. I tested and implemented new academic software before deploying to classrooms. Conducted and taught multiple session technical workshops in GameMaker, Second Life, and HTML5/CSS3 for students of various related disciplines and departments.

Lead Web Migration as Graduate Student: Academic Technologies

5/12 - 5/13

Graduate Lead on team migrating the Academic Technologies website from old CMS to new CMS, using OUCampus for performance testing, writing custom HTML and CSS, formatting layout, implementing new features and research & development. I instructed and assisted faculty at SJSU in Desire2Learn and Instructure LMS (Learning Management System) as well as instructional development software. We finished a Python script that took html files from a specified folder and migrated them to a new folder and path for over 1000 files on a web-development server at SJSU. We were directed by the Lead IT of Academic Technologies and constructed Google Groups, Google Forms, and integrated Google elements into SJSU's official website and CMS. Our team developed the site in its entirety (now legacy version); www.sjsu.edu/at/.

SWITCH: Online Publication in New Media at San Jose State University

Managerial Editor, Assistant Editor, Department Head, Web Developer

8/11 - 10/13

My tasks included management and oversight, and the acquiring of new submissions of texts and images by professional artists, students, and faculty (including myself) in digital media/new media and technologies. I managed our department heads and their respective departments (6 in total), which included content about new media, digital media, gaming, and interactive experiences in technology and art. CADRE Laboratories of San Jose State, 25 years ago, originally developed SWITCH. As well as managing, I updated switch.sjsu.edu with WordPress 3.9.1, custom CSS, HTML, and PHP (outdated/lost-funding).

ZERO1: Art and Technology Biennial

San Jose, CA

Lead on Internship Team: Mobile App Project

4/12 - 8/12

An application that provides viewers with a seamless visitor experience at an art and technology festival. ZERO1 is a c3 non-profit organization in the Silicon Valley. The goals were to create an open API and collaborative mobile application for the ZERO1 Biennial, which included all aspects of the iOS and Android application lifecycle and development structure. We hosted a two night hack-a-thon where artists and engineers collaborated. The App Lab consisted of three groups to mentor, lead, and learn. The hack-a-thon winners worked with the core intern team and development mentors for the next three months. The goal of the project was to create a volunteer based development team while learning the mobile application process.

EDUCATION

San Jose State University

2011 - 2014

Master of Fine Arts (MFA), Digital Media: Art and Technology, SWITCH Online Journal in New Media, Phi Kappa Phi (academic honor society). Art 105 (2x): Game development and game design. Was the first and sole student accepted and first graduate of this new master's degree at SJSU.

University of Nevada-Reno

2006 - 2009

Bachelor of Arts (BA), Fine/Studio Arts in Digital Media, CS 491a: advanced topic in game development/studies, CS 491b: NASA funded colloquium on serious games and simulations, GIS.

Diablo Valley Community College / Yuba Community College of California **2003 - 2005**

Art/Art Studies, General Studies, GIS. Collegiate Athlete in Baseball.

INTERESTS AND SUMMARY

Entrepreneurship, fine arts, game development, mobile development, social media, Adobe Master Suite, UI/UX, computer-vision, new technology, digital/new media, research, critical theory, and culture and community.

I've been an Associate Professor in Art 74: Introduction to Digital Media (online) at SJSU. I've held eight exhibitions in well-known public 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. Since graduating I have held independent contracting positions in design, development, and R&D.

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 and alternative sports, Tahoe, social gatherings, gaming, research, reading, exploring the Internet, spirituality, Buddhism, yoga, and philosophy.