

Toufik Zitouni

San Francisco
California

Fullstack Developer
<https://soundware.io/>
toufiksapps@gmail.com

Professional Experience

- **Soundware Inc** San Francisco, CA
Flutter & JUCE Developer *May 2021 - Present*
 - Developed Octane and Sylo JUCE plugins, with Octane as an instrument plugin and Sylo as a loops plugin
 - Implemented complete UI in JUCE C++ for both plugins, shipping them across multiple DAWs like Fruity Loops and Garage Band
 - Integrated Rubber Band library for time-stretching MIDI notes
 - Contributed to over a million in gross income by selling Octane and Sylo at \$15 each
 - Developed Bump, a beat maker app with low latency using Flutter
 - Created a Flutter module to replace the JUCE UI and implemented a Dart:ffi library to enable communication between JUCE's C++ layer and Flutter's Dart layer with NDK support on Android
 - Bump app available at:
<https://apps.apple.com/us/app/bump-drumpad-beat-making-app/id1588567902>
- **Discord Inc** San Francisco, CA
Android & iOS Developer *May 2020 - Feb 2021*
 - Worked on the Discord communities team with 5 React Native developers as the sole Android developer
 - Mirrored the store implementation from React Native to Android, maintaining the same store concept through dependency injection
 - Implemented reactive components using MVVM architecture in the Android app
 - Shipped server guidelines feature for new members to fill a survey and adhere to community guidelines when joining a server
 - Utilized Dagger for dependency injection to manage app components
 - Developed and executed unit tests to ensure code quality and reliability
 - Implemented Espresso tests for UI testing to ensure a seamless user experience
- **Facebook Inc (Meta)** Menlo Park, CA
Android & iOS Developer *January 2018 - May 2020*
 - Worked on the videos team, shipping a video carousel feature for Pages on the Facebook app using React Native & GraphQL
 - Implemented a dedicated Stories page for FBLite using HACK and GraphQL, leading to a 10% increase in stories viewed from almost 1 billion users
 - Created multiple A/B testing variations for stories dedicated spaces and utilized internal experimentation tools to analyze data
 - Delivered the final best variant to ship for stories dedicated space without affecting core metrics such as ads
 - Utilized HACK/GraphQL to render UI from the server side for various features on FBLite

- **Udemy** San Francisco, CA
Android & iOS Developer *March 2017 - December 2017*
 - Collaborated with 2 other Android developers on the Udemy mobile app
 - Implemented and shipped upgrades to ExoPlayer for the course feature
- **Crunchyroll INC** San Francisco, CA
Android & iOS Developer *December 2014 - February 2017*
 - Implemented the VRV video streaming app from prototype to release in a team of 3 developers
 - REST API implementation using JSONModel and RFNetworking for iOS, and Retrofit for Android
 - Video streaming implementation for HLS video playback
 - Handling subscription and authentication of premium and non premium users on Android
 - Implement the chromecast receiver web app for casting videos from iOS and Android devices
- **Twitter INC** San Francisco, CA
Android Developer *March 2014 - November 2014*
 - Led a project to ship features targeting emerging markets, focusing on acquiring users in India
 - Implemented a search takeover feature to display live cricket World Cup results, contributing to timely shipping and valuable data learnings
 - Worked closely with 2 other Android developers, coordinating efforts from start to finish
 - Implemented the signed-out feature for the Twitter Android app, allowing guest access to features such as search, profiles, and tweet details
 - Collected and analyzed Scribe analytics data for each experiment released
 - Reported the success or failure of experiments to the Product Manager after data analysis
 - Implemented unit testing using Scala to ensure code quality and reliability
- **Kobo INC** Toronto, ON
Android Tablet Apps Developer *May 2012 - November 2013*
 - Worked on implementing a custom Android Launcher for three devices: Kobo Arc 7", Arc 7" HD and Arc 10" HD from prototype to release, including Google certification
 - Worked on the Kobo Arc with a team of 4+ developers/UX designers to deliver an innovative tablet/eReader from prototype to release, including the Google certification of the Arc

Side Projects

- **GetStems** Web Project
Co-Founder & Developer *Jan. 2024*
 - Implement first ever stem separator that splits YouTube songs from prototype to release
 - Implement SaaS API that allows subscribers to convert any audio to stems
 - Front-end architecture used is React, Tailwind
 - Back-end architecture used is Typescript, Python for AI inference of stem splitters
 - Services used include Firebase, Google Cloud, Digital Ocean, RedisLabs
 - Implement docker-compose to deploy all services at once

Available here <https://getstems.ai>

- **Tize** iOS & Flutter Project
Co-Founder & Developer *August. 2015*
 - Developed a first of its kind Beatmaker app on iOS that allowed any level music producer to make music with a unique approach to building layers note patterns using music theory
 - Implemented in app purchasing with multiple sound banks
 - Implemented the backend on Dart, which runs with RethinkDB
 - Android version runs with Flutter SDK

Available on the App Store <https://itunes.apple.com/us/app/tize/id1130726632?mt=8>

Consulting Experience

- **Cymatics** San Francisco, CA
Audio Plugin Development *March 2024*
 - Developed audio plugins including Corrosion, a tonal noise enhancer.
 - Product available at: <https://cymatics.fm/products/corrosion-tonal-noise-enhancer>
- **Lemonaide Music** San Francisco, CA
Cloud VST Development *Jan 2024*
 - Developed cloud-based Virtual Studio Technology solutions for audio production
 - Deployed backend in Google Cloud Platform (GCP) and utilized Windows Server for MIDI to WAV conversion
 - Implemented backend using Uvicorn with Python for efficient and scalable performance
- **theGoodApi** Toronto, ON
E-Commerce Development *Nov 2023*
 - Implemented integration of theGoodApi platform with online stores including Shopify, BigCommerce, and Duda using React

Education

- **University of Waterloo** Waterloo, ON
Master of Applied Science in Electrical & Computer Engineering *2009 - 2011*
 - Relevant Courses: Data Structures and Algorithms, Foundations of Software Engineering, Computer and Network Security.
- **American University in Dubai** Dubai, UAE
Bachelor of Science in Computer Engineering *2004 - 2009*
 - Relevant Courses: Computer Architecture, Operating Systems, Open Source & Enterprise Computing with Java