HARMAN MANKU

Software Engineer

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PROJECTS

STANZA | (Full Stack Web App and Mobile App) - ***React Native, React, GraphQL, MongoDB, Redux*** 08/2021 - 8/2022

A mobile app that shows lyrics to users tinder style and a full stack web app for content management.

- Built a mobile app using React Native that allows user to view, flag, favorite, share and more.
- Led and collaborated with an engineer to build a front end web app using React and Material UI
- Designed and built a library that connected to third party APIs.
- Built a backend API using graphQL for the mobile and web app to perform CRUD operations
- Designed an economical content update system.
- Developed a secure login for the web app by hashing passwords using Bcrypt

WORDBANK | (Full Stack Web App) - ***React, GraphQL, MongoDB, Redux*** 03/2020 - 01/2021

A full stack web app for learning vocabulary using the Leitner system.

- Mapped out system architecture for a fully orginal full stack app.
- Designed and built a front end using React and Material UI.
- Created a flash card function and added keyboard controls for quick practice.
- Designed and built a backend API to allow for CRUD operations.
- Implemented JWT authentication and password hashing.
- word-bank.netlify.app

RANKME SOCCER | (Android App and Website) - ***Android Studio, Java, JavaScript, BootStrap*** 08/2019 - 1/2020

A system in which players can track and test their skills against their peers.

- Designed and built an Android app to input, process, and then upload data to Firebase
- Built a website using Node.JS and Bootstrap that retrieved and displayed the data from Firebase
- rankmesoccer.web.app

TOWER RISE | (Unity Mobile Game) - ***Unity Game Engine, C#*** 08/2020 - ongoing

An original mobile game made using unity.

- Designed a compression algorithm for economic uploads.
- Interviewed and led (author, musician, and an art studio) towards building the final product.
- Used custom data structures, asynchronous programming, and object-oriented programming.
- harmanku.gibhub.io/projects/towerrise.html

OTHER EXPERIENCE

Mechanical Engineer Jan 2017 - Dec 2019

Aether, Spectradyne *San Francisco, CA*

- Designed an original method for calibrating offsets on a 3D bioprinter.
- Conducted mechanical design and testing of production level assemblies.
- Researched, designed, and built prototypes for experimental features.

TECHNICAL SKILLS

Languages: JavaScript, Java, Python, C++, C#, Matlab
Developer Tools: Node, Express, GraphQL, MongoDB, Android Studio, ThreeJS, GSAP, Git, Github
Technologies/Frameworks: React, React Native, Redux, Unity

EDUCATION

Bachelor of Science in *Mechanical Engineering* **UC Berkeley**