HARMAN MANKU

Software Engineer

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TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Java, Python, C++, C#, Matlab, SQL, SASS, CSS, HTML
Technologies/Frameworks: React, React Native, Redux, React Router, Unity, Prisma
Developer Tools: Node, Express, GraphQL, MongoDB, ThreeJS, GSAP, Tailwind

EXPERIENCE

Freelance Full-Stack Developer
08/2021 - Present

- Designed and implemented a full stack software solution by taking the client's requirements and producing a web app for admin using **React** and a mobile app for users using **React Native**.
- Developed and implemented a **GraphQL**-based back end.
- Led and collaborated with a front-end engineer to create a responsive, user-friendly, and "fun" design for the web app which increased admin output by 200%.
- Developed and documented a custom library for streamlined access to the Back End API using easy-to-understand functions, improving development productivity and efficiency by 180%.
- Created a cost-effective app update strategy, enabling seamless updates without any additional expenses.

TOWER RISE | Game Director and Software Engineer
08/2020 - 5/2023

- Led a multidisciplinary team in the design and development of a captivating game using **Unity**.
- Implemented object-oriented programming (OOP) concepts using **C#** to create modular and maintainable code, promoting code re-usability and minimizing technical debt.
- Developed a high-performance compression algorithm that allowed for efficient data transmission without sacrificing quality or functionality that reduced estimated server costs by 90%.
- Google Play Link | Apple Store Link

Aether, Spectradyne | Mechanical Engineer
1/2018 - 1/2020

- Conducted mechanical design and testing of production level assemblies for scientific instrumentation.
- Implemented time management and documentation software tools to increase build efficiency and organization which increased worker production by over 200%.
- Designed and implemented a method for calibrating offsets between extruders that allowed Bioprinters to self-calibrate increasing time efficiency by over 400% on average.
- Analyzed and modified G-code scripts to optimize printing parameters to allow for the needs of the inhouse printer eliminating the need for a custom-built slicer.

PROJECTS

WORDBANK | React, MongoDB, Redux
03/2020 - 01/2021

- Transformed a conceptual idea into a fully functional web application using **React**.
- Designed and implemented API endpoints to enable CRUD operations, using **MongoDB** for the Database.
- Utilized **Material UI** to create a visually appealing and responsive front-end interface.
- Conducted regular testing, including unit tests and integration tests, to ensure the stability, functionality, and compatibility of the web app across various browsers and devices.
- word-bank.netlify.app

RANKME SOCCER | Android Studio, Java, JavaScript, BootStrap, CSS, HTML
08/2019 - 1/2020

- Designed and developed an Android app for seamless data input, processing, and secure upload to **Firebase**.
- Built a **Bootstrap** website that retrieved and displayed real-time data from **Firebase**.
- rankmesoccer.web.app

EDUCATION

University of California, Berkeley
Berkeley, US
Bachelor of Science - *Mechanical Engineering*
08/2012 – 05/2016