Anand Dukkipati

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Education

University of Michigan, Bachelor of Science in Computer Science　　　　　　　Sep. 2017 - April 2021
- Data Structures and Algorithms (EECS 281)
- **Object-Oriented and Advanced Programming (EECS 381)**
- **Operating Systems (EECS 482)**
- Web Systems (EECS 485)

Skills

- Languages: C++, Java, Python, Javascript
- Web: React.js, SQL, HTML/CSS
- Mobile: Android

Projects

AnandCraft

https://github.com/anandrav/AnandCraft　　　　　　　　　　　　　　　　July 2019 - Present
- Created a clone of Minecraft in C++ using OpenGL and SDL2
- Utilized **concurrency** with a pool of worker threads and job system in order to boost performance
- Utilized features of modern C++ (C++11 and onward) such as lambda expressions, move semantics, deleted functions, auto keyword, range-based loops, and more
- Wrote wrappers around the C-style OpenGL API to make code more object-oriented
- Implemented face-culling optimization for generating terrain meshes in order to boost performance

Animation Maker　　　　　　　　　　　　　　　　　　　　　　　　　　July 2018 - Present

https://play.google.com/store/apps/details?id=com.arduk.animationcreator
- Developed an Android Application available on the Google Play store for drawing traditional frame-by-frame animation
- Designed tools and features such as drawing, making undos/redos, and "onion-skinning"
- Optimized app performance for new and old Android devices
- Debugged application based on user feedback
- Continuing to add new features, improve performance, and polish UI
- Accumulated **5000+ downloads** on the Play Store

Insta485　　　　　　　　　　　　　　　　　　　　　　　　　　　　　Jan. 2019 - March 2019

http://ec2-3-17-131-121.us-east-2.compute.amazonaws.com/
- Developed a copy of Instagram hosted on AWS (Amazon Web Services)
- Implemented a REST API to simplify requesting resources from webpages
- Created interactive UI and infinitely scrolling front page using React.js
- Implemented SQL database to keep track of user data and posts
- Designed page layout and graphics using HTML and CSS
- Wrote a bash script to automatically reset website content on an hourly basis for demo purposes

Volunteering

Drop-in Tutoring　　　　　　　　　　　　　　　　　　　　　　　　　Jan. 2019 - Present
- Provided tutoring for undergraduate computer science students through IEEE-HKN

Sequoia Place　　　　　　　　　　　　　　　　　　　　　　　　　　　Jan. 2019 - Present
- Visited retirement homes to help senior citizens use technology through IEEE-HKN