Ben Paul Varghese

https://benpaul2002.github.io

Email : ben.varghese@students.iiit.ac.in

Mobile : +91-9995470757

Education

International Institute of Information Technology (IIIT-H), Hyderabad, India — September 2020 - Present

Bachelor of Technology in Computer Science and Engineering — *GPA: 8.01/10*

Projects

Temperature Tracking

- Created an android app for users to monitor their temperature readings using an external device.
- The app was created by a team of 4 members for an external company as part of the Design and Analysis of Software Systems course in IIIT-H.
- Development was done using React Native, ExpressJS, MongoDB, and NodeJS, and following AGILE methodology.

Shell

- Created a Linux shell from scratch using C
- Added functionality for most commonly used commands (cd, ls, etc.), along with support for foreground and background processes and signals

xv6 OS

- Tweaked the xv6 operating system by adding system calls - one to trace the systems calls made by a command, another to change the priority of a process
- Added two new schedulers - First Come First Served (FCFS) and Priority Based Scheduling (PBS)

Bitcoin Simulator

- Designed a bitcoin simulator using C (group project - 5 people)
- Simulator supports multiple users, with transactions being stored as a blockchain, complete with hashing for security and verification

Canteen Portal Website

- Created a canteen portal website using MERN stack
- Packaged and deployed the website using Docker

Nautica

- Created a 3D game using WebGL and ThreeJS involving a ship travelling the ocean, collecting treasures, and destroying enemy ships

Parliament Database

- Implemented a miniature database based on the Indian Parliament System using MySQL and Python (group project - 3 people)
- Added functionality for common DBMS operations, while also handling relations between the tables so as to properly simulate a parliamentary system

Algorithms Website

- Created a website as a guide to algorithms for beginners using HTML, CSS, and JavaScript

Card game

- Designed a terminal-based card game called 99 using C++
- Game is played by a single user against the computer. Added full functionality for the computer to take the best possible move at each step

Technical Skills and Relevant Courses

Programming Languages: C, C++, Python, HTML, CSS, JavaScript, SQL, Bash

APIs and Libraries: OpenGL, WebGL, ThreeJS, ReactJS, Express.js, Node.js, MongoDB, React Native

Relevant Courses: Computer Graphics, Design and Analysis of Software Systems, Machine and Data Learning, Data Structures and Algorithms, Computer Systems Organization, Algorithm Analysis and Design, Operating Systems and Networks, Data and Applications

Other Courses: Data Science & Machine Learning Track in 30 Days of Google Cloud Program