DIVYAM AHUJA

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EXPERIENCE

AMD

Software System Designer

August 2022 - Present

• I am part of Java Performance Team, working on optimizing on tuning Java for AMD processors.

Chromium

Google Summer of Code Contributor

May 2022 - September 2022

- I experimented with design patterns and worked on libraries for AudioWorklet and WebAssembly interaction.
- ScriptProcessorNode is widely being used for Audio Processing, but it runs on JavaScript main thread, which is unsecure and can have bad user experience as it runs on main thread.
- The design pattern I worked on use **Web Workers**, **Atomics**, **and SharedArrayBuffer**, to run WebAssembly and Audio Processing code on a separate Web Worker thread, which provides better isolation, security and overall better user experience
- github.com/DivyamAhuja/gsoc-chromium-freequeue

EDUCATION

Deenbandhu Chhotu Ram University of Science and Technology B.Tech. Computer Science & Engineering (CGPA: 7.81)

Sonipat, Haryana, India August 2018 – August 2022

SKILLS

Languages: C, C++, Python, JavaScript, TypeScript, Go (Golang)

Frameworks: React, Next.js, Node.js, Deno, Svelte

Tools/Platforms: UNIX/Linux, Shell, Git, Docker, Emscripten, WebAssembly

Databases: MySQL, MongoDB, Fauna

PROJECTS

fastbin: A code sharing web app | React.js, Next.js, Serverless functions (Vercel), Serverless Database (Faunadb), TypeScript

- A fullstack code sharing web application, deployed on vercel with 100% serverless backend.
- Frontend is implemented in Next. is and Backend using serverless functions (Vercel) and database (Faunadb).
- Share code easily via links, and code gets deleted from database after 5 days.
- github.com/DivyamAhuja/fastbin, fast-bin.vercel.app

YMeet | React.js, Socket.io, Node.js, WebRTC, Express

- A full-stack video call app with node.js and express serving a REST API and reactjs used for frontend.
- WebSockets and socket.io for P2P connection and WebRTC credentials sharing.
- Implements peer to peer connection using WebRTC to transmit video for upto 4 connections.
- github.com/DivyamAhuja/YMeet, whymeet.herokuapp.com

Zero: Social Media WebApp | React.js, GraphQL, Apollo, MongoDB, Node.js

- A full-stack social media application using reactjs for frontend, express apollo server for backend.
- Used MongoDB for database, semantic-ui for simple frontend and JWT based Authentication.
- github.com/DivyamAhuja/Zero_Post, zero-post.herokuapp.com/

3D Rendering Engine | C++, CMake, OpenGL, GLTF, GLFW

- An OpenGL based 3D renderer written in C++.
- Implements basic mesh loading from GLTF file and Phong model for basic illumination.
- github.com/DivyamAhuja/nyan-renderer

COURSES AND CERTIFICATIONS

Electronic Arts Software Engineering Experience Program

Electronic Arts, Forage

CS50AI: CS50's Introduction to Artificial Intelligence with Python

Harvard, edX

Virtual, Forage October 2021 Virtual, edX July 2020