Mrigank Doshy

Software Engineer

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Experience

Software Engineer II @ KCF Technologies

August 2021 - Present

- Develop, ship, and maintain major features of KCF's comprehensive machine health web application using **React**, **CSS / Sass**, and **C#**
- Build an issue management and remediation system with a streamlined process for capturing issues, facilitating conversations, and implementing recommended actions
- Lead a team of developers to build a new cross-platform mobile app using **React Native** with a focus on issue remediation and hardware management
- Core member of a small select team that's building an extensive **Design System / Component Library** and coherent user experiences across multiple apps

Software Engineer - Capstone Project @ Volvo

January 2021 - May 2021

- Explored an automated link using **Creopyson** Python library, to convert 2D schematics to 3D CAD Models in **CREO: Parametric**, eliminating the need to manually rebuild a 3D model for any change in the 2D schematic
- Developed an algorithm to suggest a network path / route for different cables, fuel lines and components depending on the space available in a given area of a truck
- Helped engineers reroute cables so that the wires take the most efficient paths, hence reducing the repetitive and time consuming process currently employed

Co-Founder & Software Engineer @ Mule

May 2019 - July 2021

- Developed and deployed an **iOS** and **Android** app using **Flutter** that enables students to be one another's service providers (100+ users)
- Designed and developed the **UI/UX** with **MobX** state-management library, **Node.js** on the backend and real-time database using **MongoDB**
- Implemented **geolocation and routing** with a cluster map of places and user locations using **Google Maps Web Services** and **notifications** using **Firebase**
- Built a **registration and authentication** system using **Dio** (http client package) and applied dependency injection in the client to request and match with other users

Computational Finance Research Intern @ Eberly College of Sciences

May 2019 - September 2019

- Developed an **object oriented** approach to compute the prices of American and European Call/Put options using different pricing methods
- Increased performance of **Monte Carlo Simulations** by over **70%** using **High Performance Computing** Techniques of Parallel Processing in **OpenMP** and **MPI**
- Built a **MPI** Cluster to run the programs on a network of machines using multiple cores to increase performance

Skills

Progarmming Languages

TypeScript, JavaScript (ES10), Dart, HTML, CSS / Sass, Python, C, C++, C#, Java, SQL

Libraries & Frameworks

React, Flutter, React Native, Node.js, .NET Core

Tools & Platforms

Git, Google Cloud, Azure DevOps, Expo, Firebase, Heroku, Netlify, Vercel, Docker

Design

Figma, XD, Illustrator, InVision

Education

The Pennsylvania State University

August 2017 - May 2021

Bachelor of Science - Computer Science
Bachelor of Science - Mathematics

Projects

App Clones

Building clones of design focused apps such as Spotify, Netflix, Instagram, Twitter, Snapchat etc. using Flutter

Astronutz

Website for Astronutz - a collection of 10,000 nutty NFTs. Built using React + Chakra UI and hosted with Netlify

Certifications

Intel: Introduction to OpenMP

IBM: Blockchain Foundation Developer

Ethereum: Building Blockchain Decentralized Apps (DApps)