Prashil Soni

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EDUCATION

Master of Science, Computer Science (GPA: 4.0/4.0)

Bachelor of Engineering, Computer Engineering (CGPA: 7.30/10)

Courses: Data Structures & Algorithms, Object-Oriented Programming C++, software engineering, 3d engineering, Machine learning

TECHNICAL SKILLS

Programming Languages: JavaScript, Python, Java, C++, PHP

Web Technologies: HTML, CSS, Vanilla JavaScript, Bootstrap, jQuery, AJAX, JSON, RESTful API, React.js, Node.js, Express.js

Framework /Libraries: Keras, TensorFlow, Pandas, SciPy, NumPy, sklearn, Django, Flask, Mavenlink

Technologies, IDEs & Tools: AWS (EC2, S3), Git, NPM, Visual studio, Adobe Photoshop, XD, Illustrator, Figma, Blender

Database: MySQL, MongoDB, PostgreSQL

PROJECTS

Cryptocurrency using blockchain Technologies: Python, Flask, postman, JavaScript, React.js

- Initially using OOP in python build a class Blockchain (a public ledger of transactions) Implemented as a list of blocks, coded block module that contains timestamp, last hash, data and hash. Follow clean code principles in python.
- Used JSON, sha256, utf-8 encoding & decoding for hashing. Test the app and find bugs using Pytest.
- Created a blockchain API using Flask and postman that read the blockchain and mine new block.
- Integrate the Cryptocurrency by Wallets, Keys, Transactions, Transaction pool, digital signature, Proof of work in python.
- Design the responsive frontend by building a UI for the cryptocurrency portion of the system, applied JavaScript, connect backend to the frontend, fetch blockchain API data and used advance concepts in React.js like component & props, useState, useEffect, context API, hooks, paginated fetch data in React.js.

Car License Plate Technologies: Python, Pytesseract, TensorFlow, NumPy, Pandas

- Pre-trained ML model SSD Inception V2 for real-time video recognition of license plate's shapes.
- Extracted the contents of the license plate in text format using "pytesseract" machine learning models.

Home automation and face detection: Technologies: Python, Internet of Things, IOT Devices: Raspberry pi, ESP32, NodeMCU

- Initial functionality included on-command turning the fan and lights on/off. It also included IR Sensor which would turn the fan and light on when someone enters the room and turn them off upon exit from the room.
- This home automation system used two IR senders and two receivers, connected directly with NodeMCU. NodeMCU, was in turn connected with a router. An ESP32 was also connected with the router.
- Designed to be installed on an apartment or house entry door and send photos of any guests to occupants by email.
- Pre-trained models from "frozen_inference_graph.pb" library to detect human body. Once detected, the model would capture using Raspberry pi camera. Then using Gmail APIs, an email will be sent to all registered users instantaneously

3d E-commerce Technologies: MongoDB, ExpressJS, React.js, Node.js, Material UI, Three.js, Bootstrap, Jmeter

- Using Node.js and Express routing, built a RESTful API endpoint, and incorporated Three.js to give 360° view of products.
- Functionality including authentication, validation, CRUD operation by admin, search filters for products, add & remove product from cart, update profile information. Use stripe for the payment module. Jmeter for testing & deploy it on heroku.

University Launchpad Technologies: HTML, CSS, JavaScript, jQuery, Ajax, Java, MYSQL, google news API

- Design system overview, database, responsive frontend and backend in Java using MVC pattern. Test application, fix the bugs, deploy on AWS (EC2). Follow the software development lifecycle. Mind mapping is done in coggle website.
- Created SQL stored procedures for some frequent transactions, e.g. login. Fetch Google news API to retrieve news.
- Students can do course enrollment and management, chatting, read the latest news and get information of events.

EMPLOYMENT EXPERIENCE

Graduate Teaching Assistant | Auburn University at Montgomery

Jan 2021 - May 2021

- Handle 120+ students & tutored 20+ students in Object oriented programming C++ and 3D Modeling course.
- Helped professor in grading, attendance and individually developed online <u>check in</u> systems with Ajax, jQuery, PHP, MySQL.

Software Engineer | EliteEvince Technology, India

Dec 2018 - Nov 2019

- Collaborate with a team under agile methodology and Work on "Farmony," a large ERP system focused on agriculture, using Spring MVC and ZK Framework, as well as MyBatis/iBatis as an ORM tool in Java/MySQL.
- In order to construct a dynamic web application, I built APIs, a database (SQL server), and write code in Java. Engaged in the life cycle (SDLC) of analysis, design, and production. Shown communication skills by presenting product features to clients.