

Abil Manoj

SOFTWARE ENGINEER

Contact

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Social Links

[Portfolio](#)

[LinkedIn](#)

[GitHub](#)

Skills

Python

Java

Spring Boot

REST API

MySQL

MongoDB

Node.js

HTML

CSS

JavaScript

React.js

Redux

Tailwind CSS

ThreeJS

Figma

Recommendation System

Machine Learning

Natural Language Processing

Computer Vision

Git

Agile

SDLC

SOLID Principles

Ethereum Blockchain

Solidity

Profile

Accomplished Full-Stack Developer with experience in application development using React.js, Spring Boot and Node.js, and a proven track record of delivering high quality software solutions. Eager to join the Software development team to contribute to key projects that drive performance and enhance learning.

Employment History

Software Engineer, Dexlock Technologies, Kochi

SEPTEMBER 2020 – AUGUST 2022

Cryptocurrency-based Strategy Composer - Version 2:

- Designed and developed a Spring Boot micro service for custom JSON instruction generation to optimize strategy execution plans for various DeFi assets. This innovation increased profit generation for vault depositors by 55%.
- Co-created a robust graph data structure accommodating 10,000 crypto assets as vertices, integrated asset swapping logic, and reduced token swap path computation time by 25%, enhancing efficiency.
- Introduced a Spring Boot micro service for third-party developers to create crypto asset graphs, which led to the incorporation of optimized sub-graphs, reducing token swapping expenses by 20% for platform users.

Cryptocurrency-based Strategy Composer - Version 1:

- Crafted a user-friendly ReactJS front-end enabling users to deposit, withdraw, view tokens, and manage vault assets and strategies effectively.
- Implemented a front-end logic for handling delayed transactions, alleviating the user burden and significantly reducing transaction costs.
- Developed an SDK for external crypto protocol websites to seamlessly interact with the application for DB and blockchain operations.

Template Listing Website:

- Generated a website listing various templates using ReactJS, demonstrating proficiency in front-end development.

Education

MSc in Advanced Computer Science, University of Birmingham, Birmingham

SEPTEMBER 2022 – SEPTEMBER 2023

Graduated with Merit

Completed Modules - Computer Vision, Computer Aided Verification Advanced Networks, Human Computer Interaction, Mobile and Ubiquitous Computing and Secure Software and Hardware.

Bachelors in Computer Science & Engineering, RSET, Kochi, India

JANUARY 2016 – JANUARY 2022

Graduated with CGPA - 7.22

Completed Modules - Data Structures and Algorithms, Graph Theory, Calculus, Relational Database, Software Development Life Cycle, Design and Analysis of Algorithms, Soft Computing, Machine Learning and Open Source Software.

Achievements

1) Provided solution to find volunteers for charity in HackTheMidlands7.0 Hackathon and received social relevant hack recognition by sponsor BJSS, Birmingham.

2) Emerged as Runner up in the Dexday Hackathon 2021 for developing text-to-image generation application.

3) Qualified to the 3rd round of Hack with Infy 2019 which is an all-India hackathon conducted by Infosys.

Projects

Portfolio Website

OCTOBER 2023 – OCTOBER 2023

- A 3D portfolio website that showcases all necessary skills and details about myself - including both technological and academic.
- Tech Stack Used : ReactJS, Tailwind-CSS, ThreeJS.

Recommendation Engine

JUNE 2023 – SEPTEMBER 2023

- Developed a hybrid recommendation system making use of BERT feature extraction for content based filtering and Graph Convolution Network and Matrix Factorization for Collaborative based filtering thereby providing better recommendations.
- Tech Stack Used : Python, NLP, Machine Learning.

Yieldster V2

OCTOBER 2021 – AUGUST 2022

- Optimized the performance and implemented additional features such as better scaling, order balancing and automated advisors on top of all features in yieldster v1.
- This project also enabled swapping crypto assets within or without using several intermediary states of tokens which maximizes the final token count.
- Also opened up a marketplace where external developers can submit better graph implementations containing better swap logic which helps provide better profits to users
- Tech Stack Used : Spring Boot, NodeJS, MongoDB, AWS.

Yieldster V1

DECEMBER 2020 – OCTOBER 2021

- A DeFi automation platform where a user could invest an asset to a vault and the vault will deposit that asset into one/many of the high performing DeFi protocols for maximizing the user profits.
- Tech Stack Used : ReactJS, NodeJS, MongoDB, AWS, Figma.

Cryptocurrency Exchange

OCTOBER 2020 – NOVEMBER 2020

- A cryptocurrency exchange for swapping tokens in the ethereum blockchain.
- Tech Stack Used : ReactJS, NodeJS, Ethereum Blockchain, Solidity, MongoDB, AWS.

Template Listing Website

SEPTEMBER 2020 – OCTOBER 2020

- A template listing website where creators can post their website designs and users can make use of it and make changes to it like adding sections, changing colors and fonts and use the final output as the websites for their personal or business use.
- Tech Stack Used : ReactJS, NodeJS, AWS, Figma, MongoDB.

Password Manager using Blockchain

JANUARY 2020 – MAY 2020

- A secure password manager and storing website build on top of ethereum blockchain.
- Tech Stack Used : HTML, CSS, JavaScript, Solidity.