Saravanakumar A

● Trichy, IN 621112 | 📞 63811-92018 | ✉ saravanakumara512@gmail.com | 🔗 linkedin.com/in/saravana-in

EDUCATION

PSG College of Arts and Science   **Coimbatore**
Master of Computer Application, CGPA: 8.92/10.00   **Apr 2020 – Mar 2022**

SKILLS

Programming/Scripting Languages: JavaScript
Server Frameworks: Node.JS, Express.JS, Nest JS, Fastify.
UI Frameworks: React.JS
Version Control Tool: Git
Database/Dev-Ops: Redis, MongoDB, PostgreSQL, Azure(Blob storage, Web-hook, Web app, CI, CD).
Others: Socket, JWT Authentication, TDD Development, Postman, Load test, Code security test, Git, REST, Scalability, API Design, DB Schema Design, Architecture, Flow Diagram, Open source contributions, Research & Development implementation.

EXPERIENCE

More than 2+ years of experience in software development.

Klenty India Pvt Limited   **Chennai, IN**
Software Development Engineer   **Nov 2024 – Current**
- Add a new queue and facilitate data consumption between microservices using RabbitMQ.
- Optimize MongoDB queries to retrieve large datasets by creating indexes and partial indexes on the necessary fields in the collection.
- Implement customer-requested features and resolve user-reported issues.
- Write comprehensive test cases in Mocha for all controllers and utility functions.

Aroopa Technologies Pvt Limited   **Chennai, IN**
Full Stack Software Engineer   **Jul 2022 – Oct 2024**
- Integrate a **Microsoft Graph API, Web-hook** to automatically process incoming emails. Upon receipt, the system will extract content and attachments, convert them to PDF, and store them in Azure Blob Storage. It will capture values from the PDF text and images, **reducing extraction time from 14 seconds to 1.5-2 seconds for a 155-page**, 25MB file. This process will be optimized to run on a **single core with 1GB of RAM.**
- Optimize the process of **uploading and downloading large volumes of files to Azure Blob Storage**, ensuring minimal time duration for the operation. Reduce the **upload time for a 2GB file from 45 seconds to 3-4 seconds** in Azure Blob Storage.
- Utilize the **Google Maps API to find locations**, determine distances between two points, and generate image files depicting the route between them
- Develop a **file system** that mimics the folder structure of Windows, enabling users to create folders and upload files. This entails **designing a schema**, implementing a back-end **REST API**, writing clean and **optimized** code, and incorporating robust **error handling**.
- Implement **Optical Character Recognition (OCR) to extract text from PDF**, **documents, and image files**.
- Design **database schema** to accommodate new features and workflows seamlessly.
- Implemented **real time communication(Socket)** between client and server architecture.
- Read the imported CSV file data read as a **stream** and extract the CSV file data and stored into database.
- Migrate the **UI (React) and API (Express App)** from **Node.JS version 14 LTS to 20 LTS** in two projects. **Updated deprecated packages and vaulnarable packages**.
- Integrate live location tracking for regional managers using **Google Map API**
- Transforming a large-scale back-end project into a well-structured application setup, incorporating **load balance, rate limiters, and clustering, worker threads.**
- Optimize the query for **auto-suggest adjusters across 20 large tables and each table has 2,000,000 records**. Reduce the execution time from **19 seconds to 4 seconds** to find the nearest best adjuster.

- To **automate the daily backup of a 100 GB** production database and store it in Azure Blob Storage, the process has been implemented on separate threads to ensure it does not interfere with other tasks.
- **Azure cloud deployment, log monitoring, connection of CI/CD pipelines**, and continuous deployment have been implemented with knowledge of Azure Dev-Ops.
- Create PDF for our project using third-party packages and other relevant tools.
- Support the senior resource in fixing hot-fix implementations, collaborate on requirements, and suggest alternative or improved implementation strategies.

Aroopa Technologies Pvt Limited   **Chennai, IN**
Full stack Software Engineer Intern   **Mar 2022 – Jun 2022**
- Worked as a full stack (MERN) developer
- Implemented real time communication (Socket)

NPM Publications (Open Source Contributions)

Configure-express-app   **Published on Sep 2023**
https://www.npmjs.com/package/configure-express-app
   If you use the command `npx configure-express-app` in Visual Studio Code or the terminal, it will create a **advanced project setup for a Node.JS project with an MVC structure**. It will also include per-loaded code for a basic **REST API** and automatically install certain modules as part of the setup process. **Auto-detect Node.JS version** Automatically adjusts settings based on the installed Node.JS version.

Google-map-JS   **Published on Sep 2023**
https://www.npmjs.com/package/google-map-js
       This package is used to obtain the distance between two points. The distance is calculated using **Google Map API**, and a visual representation of the distance route is also available. Additionally, it provides the exact address, latitude, and longitude of the location.

Link-to-base64   **Published on Nov 2023**
https://www.npmjs.com/package/link-to-base64
Publish a package for converting links (such as file URLs or image URLs) to base64 format, providing easy-to-use and reusable functionality.

Kill-running-port   **Published on Mar 2023**
https://www.npmjs.com/package/kill-running-port
The "kill-running-port" package has been developed to address an issue where, upon running the project on a port like 5000, it erroneously reports that the port is already in use, even when it's not. This issue necessitates a system restart to resolve. However, with the integration of this package, the restart time is significantly reduced. Simply input the port number to terminate the conflicting process, allowing the project to run smoothly thereafter.

Extract-PDF-images   **Published on Jun 2024**
https://www.npmjs.com/package/extract-pdf-images
Extracts images from a PDF document and saves them to a specified folder. It returns a promise that resolves to an array of objects, each containing the page number and a list of image file paths extracted from that page.

Node-uuid-unique   **Published on Jul 2024**
https://www.npmjs.com/package/node-uuid-unique
A simple Node.JS package for generate UUID and validate UUID.

Certifications

- Java script - https://www.hackerrank.com/certificates/iframe/0723cd6ab737.
- Node.JS - https://www.hackerrank.com/certificates/iframe/bbcabf23cd1a.
- PostgreSQL - https://www.hackerrank.com/certificates/iframe/a616c306123f.