

SANJAY SATHISH KUMAR

Dublin, Ireland | +353 899751053 | sanjay.sathish0604@gmail.com | [Linkedin](#) | [GitHub](#)

SUMMARY

Full-Stack Software Engineer with experience building web applications, APIs, and cloud-based systems. Skilled in React, Node.js, Express, Python, SQL, and AWS. Good at solving problems, improving performance, and writing reliable, well-tested code. Enjoys creating easy-to-use frontend features and building efficient, scalable backend systems.

TECHNICAL SKILLS

- **Frontend:** React.js, JavaScript (ES6+), HTML, CSS, Axios, React Router
 - **Backend:** Node.js, Express.js, Python (Flask), REST API Design, Caching, CORS
 - **Cloud & DevOps:** AWS(EC2, S3), Docker, Jenkins, Terraform, CI/CD, VMware, Ansible
 - **Databases:** MySQL, SQL Server, (Basic) NoSQL
 - **Testing:** Robot Framework, Postman, Selenium (Basic), Playwright (Basic), Swagger
 - **Tools & Platforms** Git, Jira, Postman, Power Query, Visual Studio Code, Agile/Scrum
 - **Concepts:** OOP, DSA, System Design Basics, Networking Basics, API Integration
-

EXPERIENCE

Software Engineer — Gigamon

Chennai, India | Apr 2022 – Mar 2023

- Collaborated closely with developers to debug backend issues, validate API responses, and ensure consistent performance.
- Developed stable virtual test environments by creating **VMware ESXi** virtual machines and managing their configuration using **Terraform**, **Ansible**, and Jenkins-based **CI/CD** pipelines.
- Performed extensive **API testing** using **Postman** and the internal TAF, helping engineers validate backend services and reducing manual testing effort by **30%**.
- Worked within an Agile team environment, participating in sprint planning, standups, and technical discussions related to system performance and backend design.
- Used **Gerrit**, **Git** for code review/version control ensuring quality and collaborative development.

Developer — DISYS India Pvt. Ltd.

Chennai, India | Aug 2021 – Nov 2021

- Worked with HR and COVID-19 datasets covering **1,000+ employees**, ensuring clean and accurate data before reporting on key workforce metrics.
- Designed **Power BI dashboards** with clear KPI visuals, helping management track vaccination progress, department-wise readiness, and state-wise workforce distribution.
- Performed data cleaning, validation, and transformation using SQL and Excel to ensure data accuracy and consistency across reports.
- Collaborated with HR and management teams to understand reporting requirements and deliver actionable insights to support decision-making.

PROJECTS

NASA Space Explorer (Full-Stack)

- Built a full-stack space data platform that connects to five NASA APIs and displays real-time information with a clean, interactive UI.
- Created a secure backend service that fetches and processes NASA data efficiently while handling cross-origin requests safely.
- Built reusable components, routing, and state management for fast UI interactions.
- Designed backend with **Node.js**, **Express** to fetch API data with optimized CORS handling.
- Deployed the backend on a cloud server to ensure high availability and reliable response times.

Budget-Based Restaurant Finder (Data Processing & Web APP)

- Developed a restaurant recommendation tool using Python and Flask that analyzes more than 80,000 restaurant records and filters options by budget, cuisine, and location.
- Processed and cleaned large datasets with Pandas and PySpark, improving accuracy, reliability, and overall search experience for users.
- Built efficient backend logic in Flask to handle user queries, improving filtering speed and performance by 40%.
- Hosted the backend on a cloud server (AWS EC2) and stored large datasets on AWS S3, ensuring scalable and smooth data retrieval.
- Designed a simple, user-friendly interface using HTML, CSS, and JavaScript, allowing users to explore restaurant recommendations easily

Disease Prediction ML Models (Thesis)

- Built machine learning models to predict diabetes and heart disease with **over 80% overall accuracy**, giving reliable early-risk indications.
- Improved the model's ability to correctly identify at-risk patients by a **large margin**, increasing its detection quality by **66–73%** after fixing data imbalance.
- Balanced the training data so the model could learn fairly from all cases, which made predictions much more consistent and dependable.
- Optimised ensemble models such as AdaBoost, Random Forest, and Gradient Boosting improved model accuracy by 15%.

EDUCATION

Dublin City University

M.Sc. in Computer Science (Data Analytics)

Anna University, R.M.D. Engineering College

B.E. in Computer Science

Aug 2023 – Sep 2024

Dublin, Ireland

Sep 2017 – Aug 2021

Chennai, India

Certification

- Udemy – Data Analyst Bootcamp
- Coursera – HTML5/CSS3/JS
- edX – SQL for Data Science