

# Ashil Patel



## EDUCATION

- **Institute of Advanced Research, Gandhinagar** Sep 2020 - May 2024  
Bachelor of Technology Information and Communication Technology Engineering. GPA : 7.9
- **Edunova Science Higher Secondary School , Ahmedabad** Aug 2017 - Apr 2019  
HSC(Intermediate, 12th-Science(PCM)) Percentage :- 70%  
JEE(Intermediate, 12th) : Secured 90 percentile in the 2019 JEE examination.

## SKILLS SUMMARY

- **Programming Languages:** JavaScript, TypeScript, Java, C++, C
- **Development:** React.js, Express.js, RabbitMQ, Nginx, REST API, Websocket(Socket.io), MongoDB, GSAP, Tailwind CSS, Micro-services,
- **Tools and technology :** Git & GitHub, AWS(EC2, S3 using SSH), Postman, VS Code

## Experience

- **Flowall Water Pump Company** [\[Frontend\]](#) May 2023 - June 2023
  - In collaboration with a Flowall water pump company, I successfully designed and developed a dynamic and engaging (minimalist) website using a HTML, CSS, JavaScript.
  - I build and craft digital landscape for flowall water pump and their primary objective is to expand Flowall's market reach and Customer base by providing and efficient and user-friendly online sales platform. Additionally, technical skills such as working with Hosting and deploy the website on the internet were also gained along the way.
- **Secretary, Computer Society and Gaming Club IAR** Jun 2022 - Jul 2023
  - As the Secretary of the Computer Society and Gaming Club at Institute of Advanced Research, Gandhinagar, I bring strong leadership and organizational skills.
  - I have successfully coordinated club activities, managed events, and promoted community engagement. I led the organization of impactful skills development workshops, fostering technical proficiency among members.
- **ICPC- International Collegiate Programming Contest.(Team Member)** Sep 2022
  - The 2021 ICPC Asia Amritapuri First Round Online Programming Contest.
    - Secured Rank 1762 out of 4992.

## PROJECTS

- **QR Code-based Reward System + Real-Time Admin Panel** [\[Admin\]](#) [\[Reward\]](#)  
**Full Stack | Scalable | Socket.IO | OAuth | MongoDB | Idempotent APIs | GSAP Animations**
  - Architected and deployed a scalable, QR Code-based Reward Redemption Platform, enabling users to scan unique QR codes, submit personal and payment details, and receive cashback. Implemented single-use, **Idempotent QR tokens** to enforce secure, one-time reward redemption and prevent abuse or duplication.
  - Created a fully-featured Admin Panel to monitor user entries in real time, with protected login (**JWT & Google OAuth**), reward status toggle (YES/NO), pagination, and charts for profession & reward analytics
  - Integrated **Socket.IO** for real-time updates between users and the admin panel without page refreshes. Designed dynamic **GSAP**-based celebration animations on reward redemption and maintained responsive UI with dark/light theme toggle using **ThemeContext**.
- **Ride-hailing Application** [\[MERN Stack- Monolithic Arch.\]](#)
  - I have developed a full-stack ride-hailing application using the MERN stack (**MongoDB, Express.js, React.js, Node.js**), designed to emulate the core functionalities of services like Uber.
  - The frontend is built with **React** and Vite, styled using **Tailwind CSS**, and incorporates **Google Maps** for **live tracking** and **Socket.IO** for real-time notifications.
  - The backend is powered by **Express**, utilizing MongoDB with **Mongoose** for data management, and features **RESTful APIs** to handle user **authentication**, **ride management**, and **map services**.
- **Microservices Architecture (Ride-hailing Application)** [\[Backend\]](#)
  - I have developed a microservices-based ride-hailing application using **Node.js** and **Express**, structured into four distinct services: **User**, **Ride**, **Captain**, and **API Gateway**.
  - Each service operates independently, communicating through **RabbitMQ** to ensure modularity and scalability.
  - The Gateway service functions as an **API gateway**, managing request routing and authentication, while the User and Captain services handle user profiles and driver management, respectively. The Ride service oversees ride creation, tracking, and status updates.
- **Zentry Clone** [\[Frontend\]](#)
  - Built using **React.js** and **Tailwind CSS**, the site offers a fully responsive layout complemented by seamless animations powered by **GSAP**, ensuring an engaging user experience across devices.
  - The website provides an engaging user interface with modern design elements, optimized for both desktop and mobile devices.