

# Karan Parwani

Senior Software Engineer, Senior Backend Engineer, Junior Blockchain Engineer, FinTech Developer

Dubai, United Arab Emirates | +971-556517579 | [EMAIL](#) | [Portfolio](#) | [Github](#) | [LinkedIn](#)

## PROFESSIONAL SUMMARY

Experienced software Engineer with extensive experience in developing scalable backend solutions for the FinTech, digital banking domains, and HR Tech Products. Leveraging technologies such as Python, Node.js, and FastAPI to create efficient, secure, and high-performing APIs and systems. A Blockchain Enthusiast with hands-on experience in Solidity, smart contract development, and blockchain integration. Demonstrates expertise in cloud technologies, containerization with Docker, and microservices architecture. Proven track record in managing complex projects, from Database Design, database development, API-driven solutions, while maintaining a strong focus on security and compliance (KYC/AML). Skilled in team management with 1 year of experience leading a team of two backend developers to deliver impactful solutions. Passionate about innovative technologies, continuous learning, and delivering exceptional results in dynamic, fast-paced environments.

## SKILLS

**Programming Expertise:** Python, JavaScript, Node.js, React.js, Solidity, Web3.

**Technical Skills:** API Development, Database Management & Programming, Blockchain Integration, Cloud Deployment, Smart Contract Testing, RESTful Services, Performance Optimization, Version Control (Git, GitLab), Software Development Life Cycle (SDLC), Continuous Integration (CI), Web Applications, RDBMS.

**Technological Expertise:** Docker, Docker Compose, AWS Services, MongoDB, PostgreSQL, MySQL, NoSQL, Webhooks, RabbitMQ, Redis.

**Tools & Web Frameworks:** AWS (EC2, S3), FASTAPI, Flask, Express, Django, PostgreSQL, MongoDB, Flyway Migrations, Nginx, PM2, Git, Auth0 by Okta, Sumsb Integration, Safe Global.

**Operational:** Team Leadership, Technical Documentation, Agile Methodologies, API Security, Solution Architecture, DevOps (Junior).

## CORE COMPETENCIES

**Programming Expertise:** Proficient in Python, JavaScript, Node.js, Solidity, Web3, and related frameworks for robust software solutions.

**API Development:** Experienced in designing, developing, and optimizing RESTful APIs, GraphQL APIs, and microservices for seamless integration and scalability.

**Microservices Architecture:** Skilled in designing, implementing, and maintaining microservices-based systems with a focus on scalability, resilience, and real-time communication.

**Blockchain Development:** Gaining hands-on experience in smart contract development, exploring decentralized applications (DApps), and familiarizing with blockchain infrastructure concepts.

**Team management:** Mentoring and overseeing a team of two backend developers, focusing on code reviews.

**Database Management:** Skilled in designing and managing relational (PostgreSQL, SQLite) and NoSQL databases with a focus on performance and scalability.

**Cloud and DevOps:** Proficient in cloud deployment (AWS, EC2), containerization (Docker).

**FinTech Solutions:** Expertise in banking APIs, KYC/AML integrations, payment platforms, and identity and access management.

**Problem-Solving:** Strong analytical skills with a focus on resolving complex technical issues and optimizing system performance.

**Agile:** Skilled in implementing Agile methodologies throughout the software development lifecycle, including conducting daily stand-ups, iterative sprints, and regular retrospectives to ensure continuous improvement.

## EXPERIENCE

Universal Assets Bank

Dubai, United Arab Emirates

**Software Engineer**

Apr '23 – Present

Website - [universalassets.com](https://universalassets.com)

- Spearheaded the design and development of a scalable digital banking backend system in Python and NodeJS, encompassing 7 modules with PostgreSQL for transactional data and MongoDB for unstructured data.
- Deployed 8 microservices with a unified API endpoint through AWS API Gateway, ensuring secure and seamless communication, while leveraging RabbitMQ and webhooks for inter-service interactions and Grafana for monitoring.
- Implemented secure APIs with JWT authentication and a rules-based engine for encrypted payload processing, enabling efficient and secure frontend-backend communication.
- Integrated Ethereum smart contracts via Python Web3, enabling blockchain functionalities such as cryptocurrency transactions and dynamic gas price calculations.
- Led a team of two developers, mentoring them and conducting code reviews, while aligning technical solutions with strategic goals and expanding expertise in blockchain through hands-on Solidity development.
- Optimized application performance by implementing caching mechanisms and fine-tuning database queries, reducing latency and enhancing user experience.

Intellica LLP

Ahmedabad, India

**Associate Software Engineer**

Aug '21 – Feb'23

Website - [rootle.ai](https://rootle.ai)

- Built secure, throttled CRUD APIs using FastAPI and Flask with JWT authentication and background task processing. Optimized database performance by developing and testing RAW SQL and PL/SQL queries, improving efficiency by 50%.
- Designed and implemented scalable email and SMS services using AWS SES and Twilio, ensuring real-time performance and timely delivery for 10,000+ daily active users and campaign alerts.
- Enhanced 200+ API responses with permission-based views, applying DRY principles and design patterns. Created unit test cases with Pytest to ensure reliable functionality.
- Worked in a team of 6 developers, utilizing tools like Jira and Postman to streamline development processes and enhance productivity.

Vovancev PVT LMT

Ahmedabad, India

**Software Engineer Trainee**

Nov '20 – Mar'21

- Actively learning programming languages like Python and JavaScript, and training in HubSpot CMS to enhance coding abilities and adapt to new tools and technologies.
- Skilled in teamwork and participating in code reviews to maintain high code quality, identify areas for improvement, and stay updated with emerging technologies.

## EDUCATION

Gujarat Technological University

Ahmedabad, India

**Master's** in Computer Application

2018 – 2020

- Focused on advanced software development, database management, and system design principles. Completed multiple projects, including a capstone project on Django E-commerce.

Gujarat University

Ahmedabad, India

**Bachelor's** in Computer Application

2015 – 2018

- Gained foundational knowledge in programming, data structures, and web development. Actively participated in tech workshops and coding challenges.

## PROJECTS

### Generate Wallet Address – [GitHub](#)

- Developed and deployed a smart contract on the Ethereum Sepolia testnet to dynamically generate wallet addresses, leveraging tools like Infura, Web3.py, and Hardhat.
- Integrated Web3.py for seamless blockchain interaction, utilizing event logs for data extraction while addressing challenges such as HexBytes slicing, checksum validation, and gas estimation.
- Gained hands-on experience with Ganache, ensuring reliable smart contract functionality through debugging and compliance with Ethereum standards

### Monitor Blockchain Transactions – [GitHub](#)

- Utilized Web3 technology to scan the Sepolia Testnet for incoming and outgoing transactions associated with a specified wallet address, saving detected transactions into a database.
- Efficiently recorded and managed transaction data for seamless storage and retrieval.
- Developed an API to enable dynamic control and management of the transaction indexer.

### Blockchain-Based Voting System – [GitHub](#)

- Developing a decentralized voting application leveraging blockchain technology to ensure transparency, security, and immutability in the voting process.
- Utilizing **React.js** for a dynamic user interface, **Node.js** for the backend, and **Solidity** for writing smart contracts deployed on the **Sepolia testnet**.
- Incorporating Web3.js for seamless interaction between the frontend and the blockchain, enabling real-time updates and user authentication through wallets like MetaMask.

## CERTIFICATIONS

- Meta Backend Developer Professional Certificate ([link](#))
- Achievements in HackerRank ([link](#))