Karan Parwani

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

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Portfolio: https://karanparwani.github.io/Portfolio

Github: https://github.com/KaranParwani

PROFESSIONAL SUMMARY

Senior Software Engineer with 4+ years of proven impact in building scalable and secure backend systems across FinTech, Digital Banking, and HR Tech startups. Specialized in Python and Node.js with a strong focus on system performance, data security, and delivering business-driven results. Experienced in architecting high-availability microservices, integrating compliance-driven financial APIs (KYC, AML, in-banking), and enabling Ethereum-based blockchain features like wallet interactions and dynamic gas pricing. Proficient in cloud infrastructure and DevOps tools including AWS, Docker, and Redis, with a solid track record of reducing latency, boosting performance, and accelerating product delivery. Skilled in owning end-to-end engineering efforts—from initial architecture to production deployment—while mentoring team members and contributing to agile, fast-paced development cycles. Known for delivering solutions that align tightly with business goals and directly contribute to product growth.

SKILLS

Programming Expertise: Python, JavaScript, Node.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.js, React.js, Django, Flyway Migrations, Nginx, PM2, Git (Version Control), Auth0 by Okta, Sumsub Integration, Safe Global.

Operational: Team Leadership, Technical Documentation, Agile Methodologies, API Security, Solution Architecture, Entry-Level DevOps Engineer.

CORE SKILLS

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 engineers, focusing on code reviews and continuous integration.

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

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

FinTech Solutions: Expertise integrating banking APIs, KYC/AML integrations, payment platforms integration, and identity and access management (IAM).

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

EXPERIENCE

Universal Assets Bank _Dubai, United Arab Emirates_
Software Engineer Apr '23 – Present
Website - universalassets.com

- Built a scalable digital banking backend using Python and Node.js from scratch, covering 7 functional modules; supported 400+ concurrent users and handled in small transactional volume within the first 6 months.
- Deployed 8 microservices with a unified API endpoint through AWS API Gateway, ensuring secure and seamless communication added caching mechanism through redis for frequently accessed data that resulted in 60% increase in system performance.
- Developed secure APIs with JWT authentication and a rules-based encryption engine for encrypted payload processing, ensuring efficient and secure frontend/backend communication using cryptographic methods.
- Implemented event-driven architecture with RabbitMQ and webhooks, enabling real-time updates and reducing API polling overhead by 80%.
- Integrated Ethereum smart contracts via Python Web3, enabling blockchain functionalities such as cryptocurrency transactions and dynamic gas price calculations using CoinGecko APIs; added a failover mechanism to maintain service continuity during third-party API downtime.
- Led backend delivery of V1 product launch, enabling onboarding of 400+ B2B/B2C users in the first quarter and directly contributing to successful investor demo and seed funding.
- Enhanced monitoring and diagnostics by integrating Grafana and Loguru—reduced incident response time by 70%.
- Mentored and managed 2 junior engineers, conducted code reviews, aligned backlog with business KPIs, and drove continuous delivery in an agile setup.
- Owned DevOps responsibilities as a Junior DevOps Engineer—Dockerized services, deployed them on AWS EC2 instances, managed CI/CD pipelines, handled secrets, and optimized deployment workflows for production readiness.

Intellica LLP _Ahmedabad, India_
Associate Software Engineer Aug '21 – Feb'23
Website - rootle.ai

- Rootle is an AI-powered application designed to help businesses automate candidate calls using Twilio based on their CV and ATS data.
- Migrated backend from Flask to FastAPI, resolving limitations around DTO validation and ORM integration—improved development speed and maintainability across modules.
- Developed secure and scalable APIs with JWT authentication and background task processing, enabling efficient asynchronous workflows for CV parsing and candidate matching.
- Boosted database performance by 50% through optimized RAW SQL and PL/SQL queries—reduced query response time on ATS data processing pipelines.
- Integrated AWS services and Twilio, enabling automated emails (SES), fast CV access (S3), and AI-driven voice calls (Twilio)—automated 1,000+ candidate interactions monthly.
- Collaborated in a 9-person cross-functional team, helping shorten sprint cycles and speed up MVP delivery by 20%.
- Actively contributed to code reviews and system design, enhancing long-term codebase quality, scalability, and onboarding ease for new developers.

Vovancev PVT LMT   *Ahmedabad, India*
Software Engineer Trainee   Nov '20 – Mar'21
- Actively learning programming languages like Python, JavaScript, Web Scraping, and actively learning 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** or **Hardhat**.
- 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)*