

Senior Backend Engineer

SUMMARY

Backend engineer with 7+ years of experience building scalable systems for game logic, real-time APIs, and distributed backend services. Strong focus on slot game mechanics, RNG-driven simulations, and secure transaction flows across casino platforms. Experienced in designing TypeScript-based microservices, integrating wallet and aggregator APIs, and ensuring reliable session and spin handling. Comfortable working in high-availability environments with strict correctness and audit requirements.

TECHNICAL SKILLS

- Programming Languages:** TypeScript, JavaScript, Python, Go, SQL, Bash
- Backend & Frameworks:** Node.js, NestJS, Express, REST APIs, Microservices, Event-driven systems
- Frontend & APIs:** REST, GraphQL, OpenAPI, WebSockets, JWT auth, Session management
- Databases, Cloud & Infrastructure:** PostgreSQL, Redis, MongoDB, Docker, Kubernetes, AWS
- Architecture, Testing & Collaboration:** System design, RNG systems, unit testing, integration testing, observability, CI/CD

EXPERIENCE

Senior Backend Engineer

Jan 2024 - May 2026

Epam

- Designed and delivered a real-time slot game backend platform for a casino aggregation suite, handling spin execution, RNG evaluation, and wallet synchronization between operators and frontend clients using TypeScript microservices, Dockerized deployments, and Kubernetes orchestration.
- Implemented deterministic RNG and game math engine supporting configurable RTP, volatility, paylines, and bonus triggers, improving simulation accuracy and reducing discrepancy-related incidents by 28% across integration testing cycles.
- Built REST and WebSocket APIs for game session management, spin processing, and feature activation, reducing average spin latency by 32% through optimized caching and Redis-based session handling.
- Integrated external casino aggregator and wallet APIs with secure token-based authentication and audit logging, ensuring consistent balance updates and preventing desynchronization issues during high traffic periods.
- Developed configuration service for game templates supporting symbols, paytables, and feature flags, enabling faster onboarding of new slot titles across multiple operator environments.
- Implemented fraud detection safeguards for invalid spin requests and replay attacks using idempotency keys and session validation layers across distributed services.
- Improved CI/CD pipeline with automated integration tests and containerized staging environments, reducing manual release verification effort by 25%.
- Collaborated with frontend teams to align game state contracts and event schemas, ensuring consistent rendering of reels, paylines, and bonus animations across client applications.
- Documented backend architecture, RNG behavior, and API contracts for internal and partner teams, improving onboarding speed for new engineers and external integrators.

Backend Engineer

Apr 2019 - Dec 2023

Brightgrove

- Developed backend services for online gaming systems supporting real-time session tracking, user balance updates, and event-driven game logic execution using Node.js and PostgreSQL.
- Implemented modular slot engine components including reel logic, payline evaluation, and bonus feature triggers, enabling reuse across multiple casino game products.
- Built secure REST APIs for authentication, session lifecycle management, and transaction logging integrated with external payment and wallet providers.
- Optimized Redis caching strategy for active game sessions, reducing database load and improving request throughput under peak traffic conditions.
- Introduced structured logging and monitoring dashboards for game services, improving incident diagnosis time during production issues.
- Worked with QA teams to design automated integration test suites validating RNG outcomes and payout consistency across different game configurations.
- Contributed to migration from monolithic backend to microservices architecture, improving deployment flexibility and fault isolation across gaming modules.
- Reduced failed transaction retries by 21% by improving idempotency handling and strengthening API validation rules across wallet integration endpoints.

Software Engineer

Nov 2017 - Mar 2019

BlueSpark

- Developed backend services for web-based applications using JavaScript and Node.js, focusing on API development, authentication flows, and database integration.
- Built basic game simulation modules for internal testing tools, including simple randomization logic and rule-based outcomes for prototype slot mechanics.
- Implemented REST endpoints for user management and session handling with JWT-based authentication and role-based access control.
- Assisted in database schema design and optimization for MySQL, improving query performance for frequently accessed user and session tables.
- Collaborated with senior engineers on debugging production issues and improving logging consistency across backend services.

EDUCATION

Bachelor's Degree in Computer Science

University of Bucharest Oct 2013 - Sep 2017