MILAD TSX

Senior Backend Engineer – Systems Reliability & Security

[Email](#) · [GitHub](#) · [Website](#) · *Location* (UTC+3)

PROFESSIONAL SUMMARY

Senior Backend Engineer with 15 years of experience turning fragile, expensive systems into reliable, secure, and predictable platforms. I'm usually brought in when backends are falling over under load, infrastructure costs are out of control, or a new product needs to be built right from day one. I design and run systems that stay up under real traffic, protect money and data, and don't wake people at 3 a.m.

Known for clear, direct communication, low-ego, team-first collaboration, and the ability to move across backend, infrastructure, and security to unblock progress. I focus on outcomes, explain trade-offs in simple language, and leave behind systems and documentation that other engineers can easily own.

KEY OUTCOMES

- Cut cloud costs by ~60% by simplifying and right-sizing AWS backend architecture, without hurting performance or user experience.
- Increased reliability in a high-traffic SaaS from ~65% to 92% and scaled throughput ~10× so the product could handle real growth.
- Helped safeguard ~$4M in client funds on-chain over 3 years with zero security incidents and strong external audit scores.
- Saved an estimated ~$50K+ in outsourcing and agency spend by taking on backend, infra, and security work in-house so projects could move forward without external vendors.
- Shipped multiple MVPs from idea → production as founding engineer / technical founder, working directly with non-technical stakeholders to refine scope and trade-offs.
- Reduced gas fees by ~99% for a critical blockchain action users relied on.

FOCUS AREAS

Backend & Systems Reliability · Scalability & Performance · Cost Optimization ·

Security · End-to-End Ownership

WORK EXPERIENCE

Senior Backend Engineer – Financial System & Security

VENT Finance – Web3 Digital Asset Investment & Launch Platform   Nov 2021 – Jun 2024

- Safeguarded roughly $4M USD of client assets on-chain over 3 years with zero security incidents by maintaining and improving high-stakes smart contracts and backend services.
- Cut monthly cloud infrastructure costs by ~60% by simplifying AWS architecture, removing waste, and tuning services so the platform stayed fast while the bill dropped.
- Reduced the cost of a key on-chain operation by ~99% by redesigning the Ethereum workflow (batching and verification), making the feature affordable to run at scale.
- Introduced automated testing and deployment (CI/CD) to reduce manual errors and release friction, so the team could ship safely and more often.
- Helped the product achieve a 9/10 external security audit score by building with security in mind from the start and working closely with auditors to address findings.

Senior Backend Engineer – Scalability & Reliability

Revision – Trivia Mobile Gaming Studio   Feb 2020 – Jul 2021

- Scaled backend throughput by ~10×, allowing the game to handle thousands of concurrent players without increasing hosting costs.
- Improved resilience so critical outages could be recovered in seconds instead of minutes, reducing impact on live games and support.
- Built a data analysis pipeline that flagged ~10% of user activity as likely fraudulent, working with product and operations to reduce abuse without hurting honest players.
- Collaborated with mobile and product teams to prioritize performance fixes that had the biggest impact on user experience and reviews.

Senior Backend Engineer | Founding Engineer

BugDasht – Crowdsourced Cybersecurity Platform   Feb 2019 – Sep 2019

- Took the platform from idea to live product in 8 months, owning architecture, backend, and integrations end-to-end.
- Implemented clear auditability and reporting features to meet regulatory expectations and build trust with early customers.
- Worked closely with the founder and early users to refine the feature set, translating security requirements into a product the dev teams could actually use.

Software Engineer – SecOps / Cybersecurity

MCI – Mobile Communication Company   Nov 2017 – Jul 2019

- Automated repetitive security operations, saving the team ~3 hours per day of manual work and reducing the chance of human error in critical checks.
- Identified and communicated security vulnerabilities earlier in the SDLC, working with development teams to fix issues before they reached production.

- Helped turn complex security requirements into practical guidelines and tools that engineers could follow without needing to be security experts.

SELECTED PROJECTS

Founder – Edge ML for Physical Security

Shahin – Physical Security Monitoring System   Sep 2025

- Built an offline-first, CPU-only computer vision system to detect and record car traffic for a housing estate, avoiding the need for cloud inference.
- Enabled fast, accurate custom reporting via on-device ML, so non-technical staff could answer "who entered when?" without digging through raw footage.
- Worked with local stakeholders to define what "useful security data" meant and adjusted the system and reports to match real-world needs.

Founder – Web3 app

dTip – Decentralized Donation Platform   Oct 2024

- Identified a gap in transparent, non-custodial crypto donations and built an open-source dApp as a weekend project.
- Shipped an end-to-end MVP integrating smart contracts with a simple web frontend so donors and recipients can see funds move on-chain in real time.
- Wrote clear documentation so contributors and users can understand how the system works and how to extend it.

Education

- M.Sc. Software Security – Thesis: Distributed Intrusion Prevention Systems
- B.Sc. Software Engineering

Certifications

- Autonomous AI Agent Development Framework – OLAS   2024
- Certified Ethical Hacker   2019

Technical Skills

Languages & Runtime:
Node.js · TypeScript · JavaScript · Python · Rust · C#, Java, Go

Backend & Frameworks:
Nest.js · Express.js · REST APIs · WebSockets · Microservices · Serverless

Frontend:
React · Next.js · HTML · CSS · Tailwind

Databases & Data:
PostgreSQL · MongoDB · Firebase · Redis · SQL · NoSQL · Query optimization · Replication

Cloud & Infra:
AWS · Lambda · API Gateway · S3 · CloudFront · GCP · Cloud Run · Docker · CI/CD · GitHub Actions · Linux · Nginx · RabbitMQ · Kafka

Observability & Reliability:
Monitoring · Logging · Alerting · Incident response · High availability · Disaster recovery · Performance tuning · Caching & database optimization · Grafana · Prometheus · OTEL/OpenTelemetry

Security:
Application security · SecDevOps · Static analysis · Threat modeling · Cryptography basics · Vulnerability analysis · White-box audits

Blockchain / Web3:
Ethereum · Polygon · Solidity · Smart contracts · Web3.js · Ethers.js · DeFi · ZK-based optimizations

Artificial Intelligence:
Google Vertex, Codex, Ollama, OpenAI, Gemini, LangChain, n8n, CrewAI, Transformers, PyTorch

Domains & Industries:
Fintech · DeFi · Gaming · Cybersecurity · Core banking · Telecom · SaaS · Real-time systems