

HAMED MOHAMED ABDELALIM

Full-Stack Engineer · Node.js & React · Application Security

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Riyadh-ready · Open to Relocation (KSA)

SUMMARY

Full-Stack Engineer with 1+ year of production experience building and securing Node.js/React systems. Shipped a high-throughput QR attendance platform serving 2,000+ daily users — reducing latency by 98%. Contributor to the NodeSecure open-source ecosystem with 7 merged pull requests covering AST security analysis, SSRF detection, and performance benchmarking. Integrates security (SAST/DAST, Circuit Breaker, threat modeling) directly into the development lifecycle.

EXPERIENCE

Full-Stack Engineer & Security Researcher · AI & Digital Transformation Unit — Tokat, Turkey *Apr 2024 – Present (Hybrid: On-site & Remote)*

- **Professional Role during Academic Tenure:** Appointed as a core engineer within the University's Digital Transformation Unit, balancing rigorous academic studies with high-impact production responsibilities.
- **Team Leadership:** Led a 3-person engineering team to architect and deploy a QR-based attendance ecosystem currently utilized by 2,000+ daily users, under final review for university-wide official adoption.
- **Performance Engineering:** Engineered a hybrid QR verification pipeline (JWT / Remote / Temporary fallback) with dynamic server-side resource allocation; achieved a 98% latency reduction (from 94.91ms to 1.53ms) and boosted throughput by +6,100% (up to 653 req/s).
- **System Resilience:** Implemented the Circuit Breaker pattern (Opossum) to ensure 99.9% service availability and automated fallback mechanisms during peak traffic periods.
- **Data Optimization:** Developed high-performance ingestion scripts capable of processing 25,000+ records in <1.5s, automating previously manual workflows and improving data integrity.
- **Wrote and structured comprehensive unit and integration tests** covering core verification flows, failure scenarios, and edge cases; achieved ~85% backend test coverage and integrated SAST/DAST into CI/CD, catching and fixing 15+ vulnerabilities before production.

OPEN SOURCE — NODESECURE ECOSYSTEM

Contributed 7 merged pull requests to NodeSecure (js-x-ray & scanner), actively improving open-source security tooling (Q1 2026)

- Introduced the sensitivity option (conservative / aggressive) across AstAnalyser, ProbeRunner, and SourceFile — enabling configurable detection depth without breaking backward compatibility. (PR #456)
- Built the insecure-random probe (flags unsafe Math.random() usage) and improved localhost/SSRF detection in the shady-url checker. (PR #452, #462)
- Added the Named Main Handlers pattern to isSerializeEnv, allowing probes to handle multiple validation scenarios; added direct process.env detection in aggressive mode. (PR #467)
- Implemented email literal collection using CollectableSet API in the isLiteral probe, with 5 comprehensive test cases. (PR #468)
- Built benchmarking infrastructure using mitata to track AST analysis performance baselines across releases. (PR #496)

PROJECTS

DragonSploit — AI-Powered Vulnerability Scanning Platform · Lead Developer *2025*

- Built an intent-based orchestration engine in Node.js that dynamically selects scan strategies — estimated 40% efficiency gain over static queue-based approaches.
- Developed a context-aware stack-detection module (WordPress, Nginx) to run targeted vulnerability tests, reducing false-positive alert rate by an estimated 70%.

EDUCATION

B.Sc. Computer Engineering · Tokat Gaziosmanpaşa University, Turkey

Expected Jul 2026 Available for Full-time Remote/On-site from August 2026

GPA: 3.38 / 4.0 · Relevant: Data Structures, Algorithms, OS, Databases, Cybersecurity

SKILLS

Languages: JavaScript (ES2022+, TypeScript), Python, C#, Java, SQL

Frontend: React.js, Next.js, Redux, Tailwind CSS

Backend: Node.js, Express.js, RESTful APIs, PostgreSQL, MySQL, MongoDB, Redis

Security & DevOps: SAST/DAST, CI/CD, Docker, Circuit Breaker, SSRF, AST Analysis, Threat Modeling

Spoken Languages: Arabic (native) · English (intermediate) · Turkish (professional)