Balasubramaniyan B

Penetration Tester | Red Team Operator | Application & Infrastructure Security

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> **Availability:** immediate joining | **Location:** relocating to Germany (North Rhine-Westphalia and across Germany; remote also possible) | **Work permit:** EU Blue Card / skilled-worker visa with employer sponsorship | **Degree:** BSc recognised in Germany (anabin) | **Languages:** English fluent, German A1 (learning)

PROFILE

Penetration tester with nearly 2 years of full-time professional experience (plus security internships since 2022) in web application, network and infrastructure penetration testing, red team operations and vulnerability assessment. Completed 30+ engagements for enterprise clients and found 40+ critical and high-severity vulnerabilities, each documented with a CVSS score and remediation guidance for technical and management readers. Develops his own Python, Bash and Node.js security tools. ISO/IEC 27001, 27701 and 42001 Lead Auditor, familiar with NIS2, DORA TLPT, GDPR and BSI IT-Grundschutz. OSCP in progress.

CORE SKILLS

Penetration testing: web application and API testing, network and infrastructure testing, Active Directory attacks, authentication testing, vulnerability assessment, manual testing, CVE analysis, CVSS scoring

Vulnerabilities: OWASP Top 10, SQL injection, XSS, SSRF, IDOR, authentication bypass, privilege escalation, lateral movement, post-exploitation

Red team: MITRE ATT&CK, command-and-control workflows, OSINT, external attack-surface mapping, phishing simulation

Tools: Burp Suite, OWASP ZAP, Nmap, Nessus, Metasploit, SQLmap, Nikto, Wireshark, Kali Linux, Playwright

Security operations: Splunk, Wazuh, IDS/IPS, incident response, threat hunting, digital forensics, malware analysis

Programming and cloud: Python, Bash, PowerShell, JavaScript, Node.js, SQL, Java, C, FastAPI, React.js; AWS, Azure, GCP, Docker

Standards and compliance: ISO/IEC 27001, 27701, 42001, NIST CSF, GDPR, NIS2, DORA TLPT, BSI IT-Grundschutz

PROFESSIONAL EXPERIENCE

Software Engineer (Freelance)
08/2026 – Present

AfterQuery Experts, Remote

- Built and hardened evaluation tasks for AI coding agents.
- Developed Playwright-based automated tests and regression checks.
- Analysed web applications for UI, state and localisation issues.
- Reviewed and validated AI-generated software fixes.

Penetration Tester and Cybersecurity Research Analyst
12/2024 – 07/2026

Terra System Labs, Bengaluru, India (full-time)

- Conducted 30+ web application, network and infrastructure penetration tests for enterprise clients and identified 40+ critical and high-severity vulnerabilities (client details confidential, aggregate figures only).
- Executed red team attack paths including privilege escalation, lateral movement and post-exploitation; mapped adversary activity to MITRE ATT&CK and used custom command-and-control workflows.
- Produced CVSS-scored reports for OWASP Top 10 findings with actionable remediation; presented risks and mitigation options to technical leads and executive stakeholders.
- Built the in-house tools RREF and Sentinel-SDK to automate reconnaissance, vulnerability assessment and reporting during red team and external assessments.
- Performed OSINT and external attack-surface mapping during red team pre-engagement planning.
- Designed an enterprise phishing simulation and awareness platform with campaign workflows, a learning management system, analytics and automated reporting; deployed in client environments.

Full-Stack Developer, Security Focus 06/2024 – 12/2024
SkillKaster, Remote

- Built React.js and Node.js features for two production platforms using secure coding, Content Security Policy, input validation and authentication hardening.
- Found 12+ injection and authentication vulnerabilities in security code reviews before deployment.

Cyber Crime Investigator Intern 06/2023 – 07/2023
Tamil Nadu Cyber Crime Wing, Coimbatore, India

- Investigated 20+ cybercrime incidents using digital forensics and Splunk log analysis; findings contributed to law-enforcement proceedings.
- Improved evidence-collection triage, cutting mean time to evidence collection by about 20%.

VAPT Intern 06/2022 – 07/2022
BM Infosec Limited, Coimbatore, India

- Assessed 5+ platforms with Nessus and manual testing; documented eight critical findings with CVSS scores and remediation steps.

SECURITY PROJECTS

Sentinel-SDK (Python) github.com/BALASUBRAMANIYANB/Sentinel-SDK

- Plugin-based black-box assessment framework detecting SQL injection, XSS, SSRF, IDOR and authentication bypass, with CVSS-scored findings; found 18 vulnerabilities missed by automated scanners across three external assessments.

RREF, RedOps Recon and Exploitation Framework (Python, Bash)

- Toolkit for port scanning, subdomain enumeration, service fingerprinting, exploitation workflow support and report generation; used in four red team engagements and cut pentest cycle time by about 35%.

WebSec Check (Node.js) npmjs.com/package/websec-check

- Published passive HTTP security-configuration CLI covering headers, cookies, CORS, redirects, caching, methods, information disclosure and security.txt, with SSRF protection, JSON output and 11 automated test suites (v1.1.0 on npm).

Phantera (FastAPI, Streamlit, scikit-learn)

- Behavioural anomaly-detection prototype using keyboard and mouse dynamics; 89% detection accuracy in lab testing.

CERTIFICATIONS

- **OSCP** (OffSec), in progress
- **CRTOM** (Red Team Leaders); **VAPT Specialist** (Bored Monk); **C3SA** (CyberWarfare Labs); **SOC Analyst** (LetsDefend.io)
- **Lead Auditor** ISO/IEC 27001:2022, ISO/IEC 27701:2025, ISO/IEC 42001:2023 (Mastermind Assurance, IAF-accredited)
- **Fellow of Management Systems Auditing** (Mastermind Assurance, 2026)

EDUCATION

BSc Computer Science (Cloud Technology and Information Security) 2021 – 2024
Rathinam College of Arts and Science, Coimbatore, India · 89%, First Class with Distinction

ACHIEVEMENTS

- Kavach 2023 national cybersecurity hackathon: top 5% of teams; TN Startup & Idea Hackathon 2.0: state-level finalist
- CTF participation (web and binary exploitation): HackerOne, Payatu, Razzify; tools and write-ups on GitHub
- HackerRank: SQL 5-star, Python 3-star