

NISARG CHASMAWALA

root@nisarg:~# Penetration Tester | Offensive Security Engineer | Cybersecurity Researcher

CPENT
Pentest Pro

CEH Master
EC-Council Elite

CHFI
Forensic Investigator

ISO 27001
Lead Auditor

MSc Cyber Sec
BCU · 1st Place Hackathon

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root@nisarg:~$ cat PROFILE.log
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Award-winning Offensive Security Engineer and elite Penetration Tester holding CPENT, CEH Master (Practical: 180/200), CHFI (90.7%), CEH v13, and ISO/IEC 27001:2022 Lead Auditor. 1st-Place winner of the BCU Cyber Security Society Hackathon (Aegis-IAM privilege escalation platform, STEAMhouse, UK). Currently pursuing an MSc in Cyber Security at Birmingham City University, uniquely integrating AI and Machine Learning into offensive security pipelines. Seeking a UK-based Penetration Testing or Offensive Security role to drive measurable security outcomes.

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root@nisarg:~$ cat EXPERIENCE.log
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IT Hardware Support Engineer

[Mar 2025 - Sep 2025]

NIVA TECHNO TRANSITION · Surat, India

- Installed and maintained enterprise computing systems and LAN/Wi-Fi infrastructure; diagnosed hardware/software/network faults; performed security checks, OS updates, and provided on-site and remote technical support.

Vulnerability Assessment & Penetration Tester

[Feb 2024 - Feb 2025]

SYSAP TECHNOLOGIES · Pune, India — Remote · Part-Time

- Executed full-scope penetration tests across web apps, REST APIs, networks, and cloud environments via Metasploit, Burp Suite, Nmap, Nessus, and OpenVAS; classified vulnerabilities per CVSS v3.1 and OWASP Top 10 with full exploitation PoC.
- Delivered executive-ready pentest reports with attack narratives, root-cause analysis, and prioritised remediation roadmaps; re-tested all critical findings post-patch; tracked adversary TTPs via MITRE ATT&CK.

Vulnerability Scanning & Penetration Testing Intern

[Jul 2023 - Jan 2024]

SYSAP TECHNOLOGIES · Pune, India

- Scanned 50+ systems with Nessus/OpenVAS against OWASP Top 10, CWE, NIST SP 800-115; contributed to live engagements — recon, exploitation, and privilege escalation using Nmap and Metasploit; authored formal pentest reports.

Network Specialist

[Jan 2023 - Apr 2023]

AIRLINK COMMUNICATION PVT. LTD. · Surat, India — Internship

- Network troubleshooting and monitoring; router/switch config, documentation, and customer technical support.

Network Engineer

[Jun 2022 - Jul 2022]

NIVA TECHNO TRANSITION · Surat, India — Internship

- Network infrastructure setup, structured cabling, access-issue resolution, and technical documentation.

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root@nisarg:~$ cat PROJECTS.log
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HEAVEN | Autonomous Penetration Testing Framework [GitHub ↗]

↳ [FastAPI](#) · [React](#) · [PostgreSQL](#) · [ExtraTreesRegressor](#) · [MITRE ATT&CK](#) · [OWASP](#)

- Architected a production-grade autonomous pentest platform featuring 31 live testing modules and a deterministic two-stage false-positive suppression engine; integrated an ExtraTreesRegressor ($R^2=0.9925$, trained on NVD data) to dynamically predict CVSS v3.1 risk scores with automated MITRE ATT&CK and Cyber Kill Chain compliance mapping.

Aegis-IAM Dashboard | Cloud IAM Risk Intelligence 🏆 1st Place — BCU Hackathon [GitHub ↗]

↳ [Python](#) · [NetworkX](#) · [AWS IAM](#) · [MITRE ATT&CK](#) · [OWASP](#) · [FastAPI](#)

- Engineered a graph-traversal IAM risk analysis engine scoring 57 dangerous IAM verbs across 10 MITRE ATT&CK tactics; hardened to pass 38 end-to-end security tests (XSS, CSRF, JSON depth-bomb); generated instant CLI patch commands. Won 1st Place at BCU Cyber Security Society Hackathon (STEAMhouse, UK).

HEAVEN-Geolntel | Zero-API OSINT & Reconnaissance Platform [GitHub ↗]

↳ [Next.js 14](#) · [TypeScript](#) · [Zero External APIs](#) · [110+ OSINT Pivots](#)

- Built a fully offline OSINT platform processing 400+ NPA area codes and 1,000+ disposable domains with absolute OPSEC and zero external data leakage; automated 110+ targeted OSINT pivots and 64 custom Google Dorks for red-team credential harvesting.

AI-Driven CVSS Vulnerability Severity Predictor | ML & NVD [GitHub ↗]

↳ [Python](#) · [Scikit-Learn](#) · [TensorFlow](#) · [NVD Dataset \(337,705 CVE records\)](#)

- Processed 337,705 NVD CVE records through a multi-paradigm feature selection pipeline; trained Extra Trees and Gradient Boosting regressors achieving $R^2=0.9988$ and $MAE=0.0400$ — delivering a production-ready automated severity scoring model.

Predictive IoT Network Flow Analysis | ML & Telemetry [GitHub ↗]

↳ [Python](#) · [TensorFlow](#) · [Scikit-Learn](#) · [RT-IoT2022 \(117,000+ records\)](#)

- 24 model configs on RT-IoT2022 (117K+ records); Gradient Boosting achieved $R^2=0.9999$ / $MAE=0.0010$; Extra Trees maintained $R^2=0.9996$ after 87% dimensionality reduction.

Android Malware Detection System | Mobile Security & ML [GitHub ↗]

↳ [Python](#) · [XGBoost](#) · [Scikit-Learn](#) · [Drebin \(15,000+ samples\)](#)

ONLINE PRESENCE

[Portfolio](#)

[Blog](#)

[GitHub](#)

[Kaggle](#)

CONTACT

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Birmingham, England, UK

[LinkedIn](#)

CLEARANCE

CPENT

Certified Penetration Tester Pro
EC-Council · Nov 2024

CEH Master

Certified Ethical Hacker — Master
EC-Council · Apr 2024 · 180/200

CHFI

Computer Hacking Forensic Investigator
EC-Council · Dec 2023 · 90.7%

CEH v13

Certified Ethical Hacker v13
EC-Council · Dec 2025

ISO 27001 IA

Lead Auditor — ISO/IEC 27001:2022
Mastermind · Jan 2026

EHE

Ethical Hacker Essentials
EC-Council · Jan 2026 · 96%

CRITOM

Certified Red Team Ops Management
Red Team Leaders · Jan 2026

CTIGA

Threat Intel & Governance Analyst
Red Team Leaders · Jan 2026

CCPP

Certified C++ Practitioner
Red Team Leaders · Jan 2026

CCEP

Cybersecurity Educator Professional
Red Team Leaders · Jan 2026

TOEFL iBT

English Proficiency
ETS · 2024 · 91/120

ARSENAL

> OFFENSIVE

Penetration Testing · Red Team Ops · Exploit Dev · Privilege Escalation · Social Engineering · OSINT · CVSS v3.1 · OWASP Top 10 · MITRE ATT&CK · Cyber Kill Chain

> TOOLING

Metasploit · Burp Suite · Nmap · Nessus · OpenVAS · Wireshark · SQLmap · Aircrack-ng · Hydra · John the Ripper · Ghidra · Snort · OSINT Framework · Maltego · Autopsy · FTK Imager · Magnet AXIOM · Acunetix · Nikto

> CLOUD & DEV

AWS IAM · FastAPI · Flask · React · Next.js 14 · TypeScript · C++ · PostgreSQL · NetworkX · Bash · Zero-Trust · SAST/DAST

> ML / AUTOMATION

Python · TensorFlow · XGBoost · Scikit-Learn · ExtraTreesRegressor

> FORENSICS

Chain of Custody · Disk Imaging · Mobile Forensics · IoT Forensics · ISO 27037/42/43 · UK GDPR · FSR · NIST · HIPAA · PCI-DSS

> PLATFORMS

Kali Linux · Parrot OS · Ubuntu · Debian · macOS · iOS · Android · Windows 11

EDUCATION

MSc Cyber Security

LANGUAGES

English — Native / Bilingual (TOEFL 91)

Hindi · Gujarati — Native / Bilingual

- ▶ Static-analysis APK pipeline on Drebin (15K+ samples); L1 Regularisation + Chi-Square feature extraction; XGBoost F1-Score 98.47% and near-perfect ROC-AUC.

AI-Powered DDoS Detection | ML & Network Defence [GitHub ↗]

↳ Python · TensorFlow · XGBoost · CIC-DDoS2019 (225,000+ records)

- ▶ NIDS on 225K+ CIC-DDoS2019 records via 1D-CNN, MLP, ensemble; XGBoost achieved 1.0000 precision and 99.99% accuracy — zero false-positive analyst alerts.

Adaptive Vulnerability Risk Scoring | AI Threat Assessment [GitHub ↗]

↳ Python · XGBoost · Random Forest · KNN · One-Hot Encoding

- ▶ Dynamic context-aware 0–10 risk scoring over static CVSS; engineered TCP/UDP feature pipelines; validated XGBoost, RF, Decision Tree, KNN regressors via MSE, RMSE, MAE, R².

root@nisarg:~\$ cat ACADEMIC_LABS.log

End-to-End Penetration Testing & RCE Assessment

↳ Nmap · Metasploit · Redis · Openfire · Git Hooks · Reverse Shells · CVSS 10.0

- ▶ Identified CVSS 10.0 RCE vulnerabilities across Redis, Openfire, and Gitea; achieved system-level access via Redis replication abuse, Openfire admin exploit, and Git Hooks weaponisation; delivered professional pentest report.

Digital Forensic Investigation — Missing Person Case

↳ FTK Imager · Autopsy · Magnet AXIOM · MOBILedit · ISO 27037/42/43 · UK GDPR

- ▶ ISO-aligned forensic plan covering endpoints, mobile, IoT, cloud, and CCTV; full chain-of-custody management and timeline reconstruction compliant with UK GDPR, NPCC, and FSR guidelines.

Strategic Security Audit — Cyberzone AI Ltd. (AI Healthcare & Fintech)

↳ ISO/IEC 27001:2023 · UK GDPR · DPA 2018 · HIPAA · FIDO2 · Purple Team

- ▶ Full ISO 27001:2023 audit of AI-driven healthcare and fintech systems; phased roadmap with MFA (FIDO2), automated patching, immutable backups, and Purple Team exercise recommendations.

root@nisarg:~\$ cat ACHIEVEMENTS.log

- ▶ 🏆 1st Place — BCU Cyber Security Society Hackathon (STEAMhouse, Birmingham, UK): Aegis-IAM privilege escalation detection platform, outperforming competitive university teams.
- ▶ MSc Dissertation: Systematic literature review on Deep Reinforcement Learning and LLM integration in autonomous offensive security; formulated a secure-by-design framework compliant with EU AI Act and GDPR.
- ▶ 7 industry virtual job simulations (2025): Deloitte · MasterCard · Telstra · Datacom · TATA · AIG · Commonwealth Bank — threat analysis, SOC operations, fraud investigation, and telecom vulnerability assessment.

root@nisarg:~\$ cat RESEARCH.log

AI & Autonomous Penetration Testing Frameworks

↳ MSc Dissertation · BCU · 2025–26

- ▶ Evaluated DRL and LLMs in autonomous offensive security; compared MAS vs single-agent success-rate metrics on zero-day targets; proposed Neuro-Symbolic AI + HITL governance framework compliant with EU AI Act and GDPR.
- ▶ IT Project Management: 7-week Hybrid Agile-PRINCE2 plan (Monday.com, 5-phase WBS) for autonomous AI-driven pentesting system with GDPR/EU AI Act compliance guardrails.

root@nisarg:~\$ cat BLOG.log

Technical Security Blog · Blog

↳ Personal knowledge-sharing platform covering offensive security research, networking, cybersecurity hardware and software tools and ethical hacking and penetration testing.

root@nisarg:~\$ cat FIELD_SIMULATIONS.log

Virtual cybersecurity simulations (2025): Deloitte · MasterCard · Telstra · Datacom · TATA · AIG · Commonwealth Bank