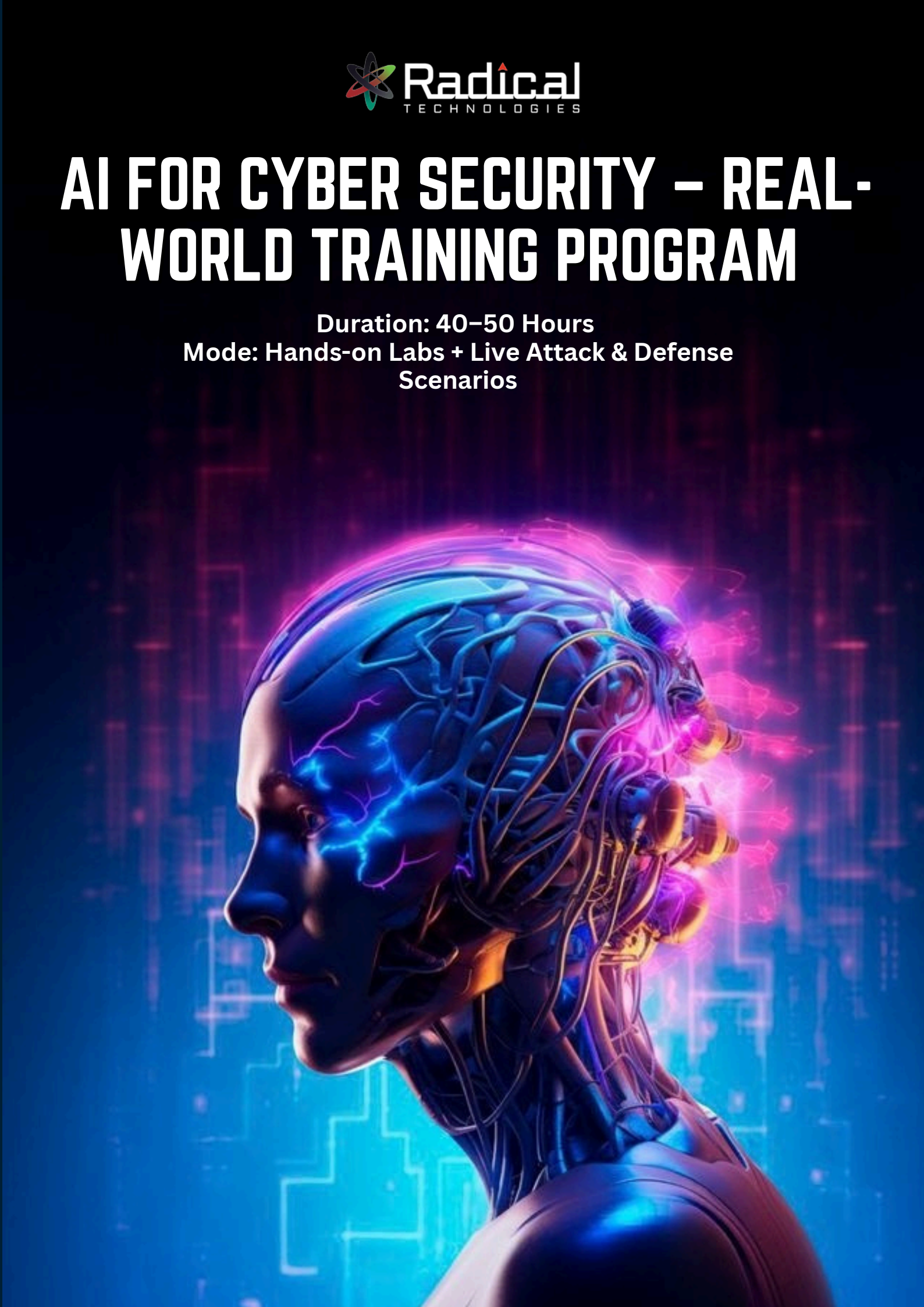
Radical
TECHNOLOGIES

AI FOR CYBER SECURITY – REAL-WORLD TRAINING PROGRAM

Duration: 40–50 Hours
Mode: Hands-on Labs + Live Attack & Defense Scenarios



AI FOR CYBER SECURITY – REAL-WORLD TRAINING PROGRAM

DURATION: 40–50 HOURS MODE: HANDS-ON LABS + LIVE ATTACK & DEFENSE SCENARIOS

JOB-ORIENTED, REAL-WORLD AI for Cyber Security Training Program, designed for SOC analysts, security engineers, ethical hackers, and IT professionals who want to apply AI/ML in real cyber-defense environments. This is hands-on, tool-driven, and scenario-based — not theory.

TARGET ROLES:
SOC ANALYST (L1 / L2 / L3) CYBER SECURITY ENGINEER
THREAT HUNTER BLUE TEAM / PURPLE TEAM ENGINEER
AI-DRIVEN SECURITY ANALYST

MODULE

Module 1: Cyber Security + AI Foundations Topics Why AI is critical in cyber security AI vs traditional security tools ML vs DL vs GenAI in security Attack lifecycle & MITRE ATT&CK Data types in cyber security Assignment Map AI use cases to cyber attack stages

Module 2: Python & Data for Cyber Security Topics Python for security analytics Log parsing & normalization Feature engineering for security data Handling noisy & imbalanced datasets Hands-On Parse firewall & SIEM logs using Python

Module 3: Machine Learning for Threat Detection Topics Supervised vs unsupervised learning Anomaly detection techniques Classification of malicious activity Model evaluation for security use cases Labs Detect malicious login attempts Build brute-force detection model

Module 4: AI-Driven Malware Detection Topics Static vs dynamic malware analysis Feature extraction from binaries ML-based malware classifiers Evasion techniques & countermeasures Project Build AI-based malware detection system

Module 5: Network Intrusion Detection with AI Topics AI-powered IDS/IPS Flow-based tra ic analysis Deep learning for network threats Encrypted tra ic challenges Hands-On Build ML-based IDS using real datasets

Module 6: AI for SOC & SIEM Automation Topics AI-assisted alert triage False positive reduction UEBA (User Entity Behavior Analytics) SOAR integration Scenario SOC flooded with alerts — automate prioritization.

Module 7: AI for Phishing & Fraud Detection Topics NLP for email analysis Phishing URL detection Financial fraud detection models Behavioral analytics Project Phishing detection using NLP & ML

Module 8: GenAI for Cyber Security Topics LLMs for threat intelligence AI-assisted incident response Attack simulation using AI Secure use of GenAI in enterprises Hands-On Build AI chatbot for SOC assistance

Module 9: Threat Intelligence & AI Topics AI-driven threat intel enrichment IOC correlation Dark web monitoring concepts Predictive threat modeling Assignment Build AI-based threat scoring system

Module 10: Cloud & Endpoint Security with AI Topics AI in cloud security posture management EDR/XDR analytics Container & Kubernetes security (AI view) Zero Trust with AI

Module 11: Model Deployment, Ethics & Security Topics Deploying ML models securely Adversarial ML attacks AI model poisoning Ethics & compliance (GDPR, AI Act) Scenario Attackers targeting your ML models.

Module 12: Incident Handling & Blue Team Ops Topics AI-assisted IR workflow Root cause analysis Threat hunting using ML Reporting & compliance

CAPSTONE PROJECTS (REAL ENTERPRISE)

AI-Powered SOC Platform

- ✓ Log ingestion
- ✓ Threat detection models
- ✓ Alert prioritization
- ✓ Automated response

AI-Based Intrusion Detection System

- ✓ Network tra ic analysis
- ✓ Anomaly detection
- ✓ Live alerting

REAL–WORLD SKILLS YOU WILL GAIN

- ✓ Apply AI in real SOC environments
- ✓ Build ML models for security use cases
- ✓ Reduce false positives
- ✓ Automate incident response
- ✓ Prepare for AI-driven cyber roles

TOOLS & TECHNOLOGIES

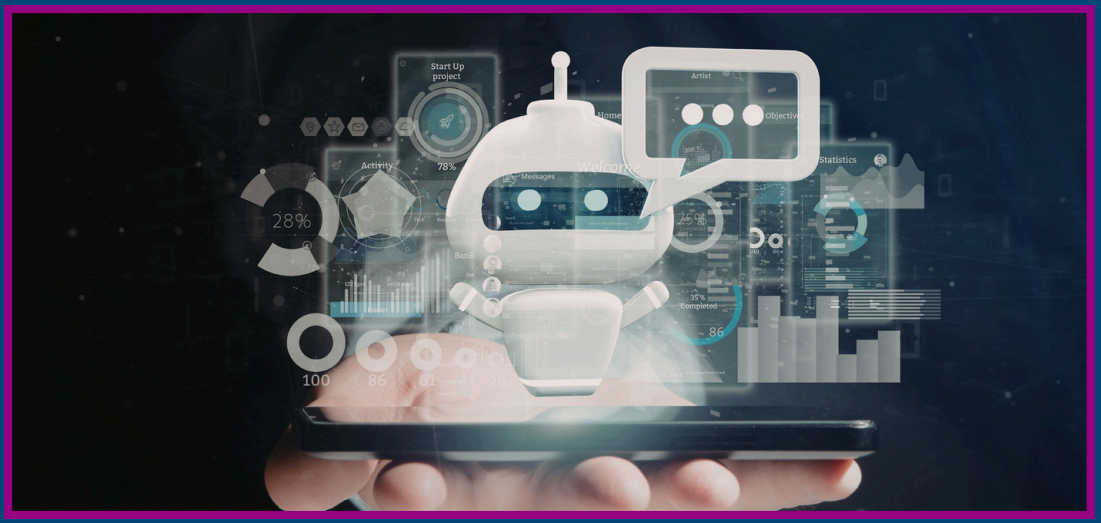
Python, Pandas, Scikit-learn TensorFlow / PyTorch (intro) ELK / SIEM concepts Wireshark, Zeek MITRE ATT&CK GenAI / LLM APIs

JOB ROLES PREPARED FOR

AI Security Engineer SOC Analyst (AI-Driven) Threat Detection Engineer Cyber Security Data Scientist

CERTIFICATION ALIGNMENT

CompTIA Security+ (AI concepts) CEH (AI use cases) CISSP (future-ready domains) AI Security specializations



CONTACT US

+91-8055223360

www.radicaltechnologies.co.in

PUNE | BANGALORE | KERALA | UK

training@radicaltechnologies.co.in