# KAUSHAL KUMAR SINGH

Application Security Analyst | Vulnerability Management | Web & API Security

Delivering enterprise-grade security solutions through advanced application security testing, comprehensive vulnerability management, and strategic incident response

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### **About Me**

I am an Application Security Analyst with one year of experience in securing enterprise applications, APIs, and endpoint infrastructures. At Tech Mahindra, I focus on application risk assessments, penetration testing, and secure code reviews. My work helps organizations find and fix vulnerabilities before they can be exploited. I collaborate closely with development teams to integrate security controls into the software development life cycle, ensuring strong protection while allowing for business agility.

#### My expertise includes:

- Application & API Security: risk assessments, vulnerability testing, and threat modeling
- Endpoint Security: deploying and managing CrowdStrike Falcon across more than 1,400 endpoints
- Network Security: configuring Palo Alto Next-Generation Firewalls and enforcing USB device control policies
- Linux Security Administration: managing and securing enterprise systems

I hold certifications from (ISC)<sup>2</sup>, Fortinet NSE, and Google, which show my commitment to staying updated in a changing threat landscape. My professional experience also includes significant

Beyond my technical skills, I bring leadership and discipline from my service as an NCC Volunteer, where I hold B and C Certificates, and as a Student Council Member. These experiences have enhanced my teamwork, problem-solving, and decision-making skills, which I use in high-pressure cybersecurity situations.

With a strong passion for protecting digital environments, I continue to deepen my expertise while providing innovative security solutions that help organizations stay strong against new cyber threats.

1

Year in Application Security

1400+

**Endpoints Secured** 

5+

**Industry Certifications** 

# **Security Operations Metrics**

99%

EDR Deployment Success

1,400+ endpoints secured

40%

Detection Accuracy Improvement

IOA/IOC rule optimization



25%

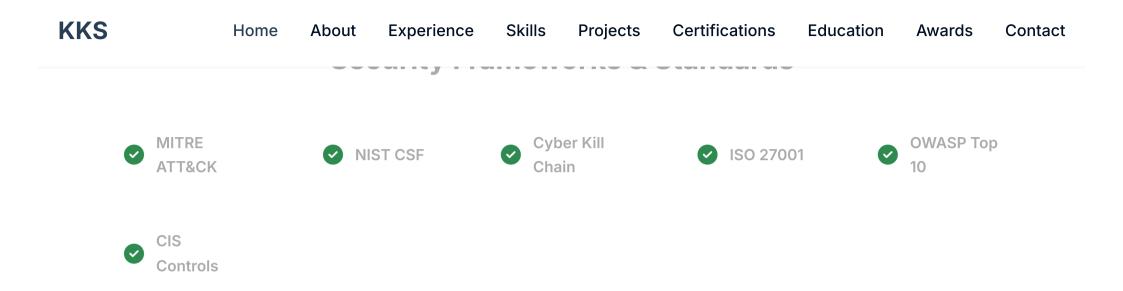
False Positive Reduction

Enhanced threat filtering

15

Avg. Response Time (min)

Critical incident handling



## **Professional Experience**

### **Application Security Analyst**

#### **Tech Mahindra Ltd**

May 2024 - Present | Pune, India

- Perform application risk assessments and security testing, identifying and mitigating vulnerabilities in enterprise web and API environments.
- Integrate secure coding practices into SDLC, reducing security defects and strengthening overall application resilience.
- Lead penetration testing, automated scanning, and compliance audits aligned with ISO 27001 standard.



### **Trainee**

**Hitachi Systems India Pvt Ltd** 

- ▶ Supported high-priority incident response, ensuring rapid containment of threats.
- ▶ Configured firewall and device control policies to harden endpoint security.



### **Cybersecurity GRC Intern**

#### **Skillweed**

Mar 2024 - Apr 2024 | Remote

- Designed risk management frameworks and incident response playbooks (NIST, SANS).
- Conducted post-incident forensic analysis to identify weaknesses and recommend improvements.
- ▶ Gained hands-on exposure to governance, compliance, and enterprise security standards.

#### reduction initiatives

Developed proficiency in cybersecurity governance principles, regulatory compliance
 requirements, and industry frameworks that form the foundation of enterprise security programs

### **Technical Skills**



Vulnerability Management

Vulnerability Assessment & Penetration Testing (VAPT)

ISO 27001 / NIST Frameworks

Application Security (Web & API)

**Secure Coding Practices** 

Incident Response & Threat Analysis



CrowdStrike Falcon EDR

Palo Alto Firewalls

Fortinet FortiGate

**Burp Suite Professional** 

Nessus & Qualys

Wireshark & tcpdump



**Manual Penetration Testing** 

Endpoint Protection & Management

Firewall Configuration & Management

Network Security (TCP/IP, DNS, SSL/TLS)

Malware Analysis (Static/Dynamic)

# **Projects**

TraceQuest: A System Information and Artifact Collection Tool

**Windows Live Forensics Tool** 

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**Mobile ForenXpert** 

**Android Forensics & Malware Analysis Platform** 

- Automates acquisition of critical system artifacts including installed application metadata (names, install dates, publisher details, version numbers)
- Advanced USB device forensics through registry analysis with localized string resolution for precise device identification
- Robust Google Chrome history extraction using temporary database copies to prevent data corruption during live acquisitions
- Features comprehensive error handling, detailed logging, and PDF report generation capabilities for rapid assessment of system compromise while maximizing data integrity for forensic investigators

Forensics Windows Python

- Integrates automated evidence extraction pipelines for comprehensive data acquisition
- Real-time malware detection engine leveraging advanced signature-based analysis
- Identifies malicious applications and security compromises with high accuracy

Android Malware GUI



- Architected secure self-service retail checkout application engineered as hardened edge POS endpoint
- Built within zero-trust architecture for maximum security posture
- Implemented defense-in-depth security controls including multi-factor authentication and role-based access control
- Features encrypted transaction processing to protect sensitive payment data and prevent unauthorized access

Zero Trust MFA POS

### **Certifications**



Certified in Cybersecurity (CC)

(ISC)<sup>2</sup>

Sep 2025



**Google Cybersecurity Professional Certificate** 

Google

Apr 2024



Junior Cybersecurity Analyst Career Path

**Cisco Networking Academy** 

Apr 2024



NSE 1-3 Network Security
Associate



Google IT Support
Professional Certificate



**Google AI Essentials** 

Google

### **Education**



### **Master of Computer Applications (MCA) - Cyber Security**

D Y Patil International University, Akurdi, Pune

Jun 2023 - 2025



### **Bachelor of Computer Applications**

**Goa University** 

2020 - 2023

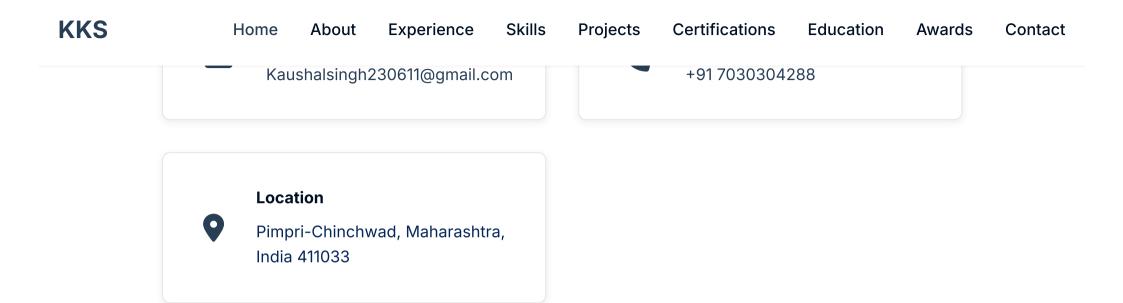


### **Higher Secondary School (HSS) - Science**

St. Andrew's Higher Secondary School 2020

# **Awards & Recognition**

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