# Manan Mandal

+91-9675706970 | mananmandal006@gmail.com | LinkedIn | GitHub | Blogs

### **SUMMARY**

Passionate about cybersecurity and AI, I bring a strong foundation in threat detection, secure system design, and real-time data analysis. With hands-on experience across tools like Splunk, Burp Suite, and TensorFlow, I thrive at the intersection of security and innovation. Committed to continuous learning, I aim to build resilient systems that defend against tomorrow's digital threats.

#### **EXPERIENCE**

#### CYBERSECURITY INTERN, Skill Vertex, Remote

Jul 2022 — Aug 2022

- Conducted a comprehensive vulnerability assessment on Metasploit able 2 using tools like Nmap, OpenVAS, and Metasploit.
  - Gained hands-on experience in manual and automated vulnerability scanning, using Exploit-dB, CVE databases, and Searchsploit.

## Software Developer Intern, IBM, Remote, India

Jan 2025 — May 2025

- Built a CNN-based model using TensorFlow and OpenCV to detect and classify facial emotions in real time. Performed image preprocessing, feature extraction, and hyperparameter tuning to achieve over 90% accuracy on validation datasets.
  - Focused on model training, evaluation, and optimizing performance across diverse facial expression inputs.

#### **EDUCATION**

## Uttaranchal University, Dehradun, India - B.SC., INFORMATION TECHNOLOGY

May 2023

During my BSc in Information Technology, I served as the Vice President of the Competitive Cell, where I led academic initiatives including national-level quizzes, debates, and technical events. This experience strengthened my leadership and organizational skills while fostering collaboration among diverse student groups and promoting a culture of academic excellence.

**University of Petroleum and Energy Studies, Dehradun, India** - MCA, CYBERSECURITY & FORENSIC May 2025 Completed an MCA with specialization in Cybersecurity and Digital Forensics, gaining hands-on experience in threat analysis, vulnerability assessment, and incident response. Developed a strong foundation in digital forensics, risk management, and implementation of security protocols. The program emphasized practical application through real-world projects and tools, enhancing proficiency in system protection, data integrity, and cyber investigation methodologies.

## **SKILLS**

Tools : Burp Suite, Nessus, Wireshark, Metasploit, Splunk, Snort, Packet Tracer, Arduino Software

**Security Concepts**: Network Security, Vulnerability Assessment, Penetration Testing, Incident Response, SIEM,

**SOC Monitoring** 

**Programming & Scripting**: Python, Bash, SQL, HTML/CSS

AI & ML : OpenCV, Pandas, NumPy, Scikit-learn, Facial Recognition Algorithms, TensorFlow

Cloud & Systems : AWS (Basics), Linux Administration, Windows Security

Languages : English, Hindi, Bengali, German (Basic)

# CERTIFICATIONS

Fortinet Certified Associate in Cybersecurity, FORTINET

Jul 2024

Cybersecurity Essentials, CISCO

Aug 2023

Network Security & Database Vulnerabilities, IBM

**Apr 2023** 

#### **VOLUNTEERING**

Cyber Volunteer, National Cyber Crime Reporting Portal, India

Mar 2024 — Present

## **PROJECTS**

### Data Leakage Detection, UPES, Link

Sep 2024 — Dec 2024

- Developed a web-based Data Leakage Detection System using PHP, MySQL, JavaScript, Bootstrap, and HTML5 to track unauthorized data dissemination.
- Designed a dynamic and real-time monitoring system, integrating both static and behavioral analysis for enhanced data security.

#### Emotion Detection using Facial Recognition, IBM, Link

Jan 2025 — May 2025

- Applied techniques such as data augmentation, grayscale normalization, and dropout to improve model robustness.
- Evaluated performance using confusion matrix and accuracy metrics, fine-tuned the CNN to enhance prediction reliability across diverse expressions.