# **Bhavya Tiwary**

# **EXPERIENCE**

**Infosys Ltd. [Information Security Group (ISG) - Security Architecture]** Senior Information Security Engineer

2021 - Present

- Developed the **AI Model security and governance framework** for firm wide usage. For different stages of the model lifecycle defined the security recommendations and guidelines like data encryption, access management, vulnerability etc. that would be followed by developers.
- Evaluated up to 40+ third party suppliers to determine their security posture and compliance with ISO 27001, NIST and SOC standards as part of the vendor security assessments. Reviewed products and vendors in multiple domains like BAS, Chaos Engineering, Cloud, DevSecOps, Financial Reporting, HR Onboarding etc.
- Onboarded Palo Alto's Prisma CNAPP tool for company's cloud security governance initiative. As
  part of onboarding, established cloud baseline controls for AWS, Azure and GCP cloud accounts to
  ensure security policies compliance.
- Reviewed and updated the **business continuity and disaster recovery plan** for business-critical services like AD and SIEM including data protection and security solutions for backup storage.
- Conducted risk assessments and identified potential security risks within 100+ internally developed applications including 50+ AI based use cases. Collaborated with IT teams to design and implement secure cloud architecture to ensure that security controls are integrated into the company's technology solutions from the initial design stage.
- Enforced security policies for **400**+ **special case email IDs** to reduce risk by 90%. Also, standardized and enhanced processes for IAM use cases related to shared access mailboxes and IDs.
- Essayed a key role in improving Standard Operating Procedures and policies for the smooth functioning of processes and **standardizing execution** of assigned tasks.
- Coached multiple colleagues on technical risk assessments, architecture reviews and vendor evaluations.

# **EDUCATION**

MIT World Peace University | B Tech - Computer Science and Engineering

GPA 7.2/10

## **CERTIFICATIONS**

- CompTIA Security+ ce (expiring 2026) |Link
- Microsoft Certified: Azure Fundamentals (AZ 900) |Link

### **PROJECTS**

• Real time Helmet Detection of Motorcyclists using YOLO |Link

The objective was to design a system for **real-time detection of motorcyclists without helmets using the object detection-algorithm YOLO v4** (You Only Look Once) to help solve the issue. Before training the model, the **training datasets was manually annotated with the BB information** for Hemet and No Helmet using LabelImg software since YOLO needs a ground truth. The model was trained for 6,000 iterations with the input image dimensions of 416×416 pixels. The **overall mean precision (mAP)** for two classes was **92.94%** with the **average training loss of 0.0829**.

### **SKILLS**

-Development Languages: Python, C++/C, SQL, Bash

<u>-Other Technologies:</u> AWS, Azure, GCP Terraform, Kubernetes, Docker, Prisma CNAPP, Qualys CSPM, Git, GitHub Action, Power BI, Tableau, R

-Security Technologies and Tools: Technical risk assessments, Architecture reviews, Vendor evaluations, Risk management, IAM, AI/ML Lifecycle Security- Responsible AI, BC/DR, SOC 2 Type I/II/III, NIST AI RMF 1.0, NIST 800-39, ISO 27001, BMS/IoT Security, Web Security, Cloud security