Ansu M George

+91 8330096423 - ansumgeorge092004@gmail.com - LinkedIn: ansumgeorge - GitHub: cybergirlanss

EDUCATION

VIT Bhopal University   **10/2022 - 05/2026**
B.Tech in Computer Science (Minors in Cloud Computing) - 8.48/10 GPA   *Bhopal, MP*

TECHNICAL SKILLS

- **Programming Languages:** Python — **Frameworks & Tools:** Flask, NumPy, Scikit-learn, OpenCV, AWS, MySQL

PROJECTS

Threat Detection in Crowded Environments   **01/2025 - 04/2025**
Technologies: Python, PyTorch, YOLOv8, MediaPipe, 3D CNNs

- Engineered a multi-modal ML pipeline combining YOLOv8 (object detection), MediaPipe (pose estimation), and 3D CNNs (temporal analysis) for real-time threat classification in crowded environments
- Designed feature extraction pipeline capturing spatial, temporal, and interaction features, improving classification accuracy across 8+ threat categories (abuse, arson, robbery, explosion, etc.)
- Applied SMOTE for class balancing, dropout regularization, and class-weighted loss to improve F1 score (92.53%) and AUC (99.47%)
- Optimized inference with half-precision GPU acceleration and adaptive confidence thresholds for reliable real-time detection
- Developed real-time visualization module for monitoring and validation during inference
- **IEEE Certified Presentation:** Published findings in IEEE ICSTSDG proceedings and received official IEEE certification

Self-Checkout Counter System   **08/2023 - 10/2023**
Technologies: Python, Flask, MongoDB, OpenCV, Pyzbar

- Developed a self-checkout kiosk application simulating real-world retail checkout with barcode scanning, inventory management, and digital payment integration
- Implemented real-time barcode detection using OpenCV and Pyzbar, with automatic bill generation linked to MongoDB inventory collections
- Designed workflow for dynamic bill updates, handling duplicate items, out-of-stock prevention, and quantity-based price adjustments
- Integrated UPI QR code generation for payments and CSV export functionality for permanent billing records
- Built a simple user interface flow with camera-based scanning, item confirmation, and final bill display for realistic retail automation

EXPERIENCE

AICTE Virtual Internship   **11/2024 - 12/2024**
Edunet Foundation — TechSaksham (Microsoft & SAP)
- Completed AI applications training with focus on business optimization and REST API development
- Designed AI-driven solutions for enterprise process enhancement

FINLATICS Virtual Internship   **11/2024 - 02/2025**
Data Science & Python (Banking Domain)
- Developed predictive models for a banking case study using Python (Pandas, NumPy, Scikit-learn)
- Analyzed customer financial data to identify patterns and improve risk assessment strategies

CO-CURRICULAR

Cloud Zone Club   **02/2024 - Present**
Core Member
- Serve as a core member of the Cloud Zone Club, organizing workshops and facilitating learning sessions.

National Cadet Corps (NCC)   **06/2020 - 12/2022**
Cadet
- Completed basic military training and shooting including discipline and leadership programs
- Participated in community service initiatives and social awareness campaigns

CERTIFICATIONS

- AWS Solutions Architect – Associate (Ethnus) — AWS Cloud Practitioner (Coursera) — IEEE Conference Certification

HOBBIES

- Avid reader of psychological thrillers and detective fiction (Favorite authors: freida mcfadden, Gillian Flynn)
- Solve logic puzzles and mystery games to enhance analytical thinking