Jonathan Jesni Manissery

Pune, India jonathanjesni@gmail.com +91 9061391335

EDUCATION

Indian School Muscat, *Higher Secondary Education (CBSE)* 05/2023 | Muscat, Oman
Completed Higher Secondary Education under the CBSE curriculum.

Indian Institute of Information Technology Pune, 05/2027 | Pune, India
Bachelor of Technology (B.Tech)
Undergraduate student in Computer Science with a focus on core computing concepts.

PROJECTS

WebGuardian: Multimodal Phishing Detection System,
Research Project | Deep Learning, Computer Vision, Cybersecurity
- Developed a multimodal phishing detection system combining URL-based and visual webpage features
- Achieved **~98% classification accuracy**, outperforming single-modality URL-only models by **~5–7%**
- Reduced false positives by integrating visual cues using MobileNetV2-based feature extraction
- Implemented Char-CNN + LSTM for character-level URL analysis, improving robustness against obfuscated phishing URLs
- Evaluated the model on **thousands of labeled phishing and legitimate webpages** under realistic conditions

Ludex: Hybrid Game Recommendation System,
B.Tech Project | Machine Learning, Recommender Systems
- Built a hybrid recommendation system combining content-based filtering and collaborative filtering
- Improved recommendation relevance by **~12–18%** compared to standalone content-based filtering
- Applied diversity-aware re-ranking to increase catalog coverage by **~20%**, reducing popularity bias
- Handled cold-start scenarios for new users using metadata-driven fallback logic
- Evaluated recommendations on **large-scale Steam user–game interaction data** using offline metrics

AI-Driven 3D Scene Rendering & Synthetic Data Generation,
Academic Project | Blender, Python, GPU Computing, Computer Vision
- Built a **GPU-accelerated Blender pipeline** to automatically render synthetic images using Python scripting
- Automated object transformations and batch rendering to generate **diverse training datasets**
- Reduced rendering time significantly by leveraging **Cycles GPU ray tracing** instead of CPU rendering
- Designed the pipeline to support **automatic bounding-box annotation** for object detection models
- Structured the system for integration with **YOLO-based computer vision training workflows**

SKILLS

Languages & Frameworks: — Python, Java, C/C++, Dart, Flask, Flutter, **AI / Machine Learning:** — Deep Learning (CNN), Computer Vision, Recommender Systems, Object Detection (YOLO), **Tools & Systems:** — PyTorch / TensorFlow, OpenCV, NumPy, Pandas, Blender (bpy), GPU Computing

AWARDS

AI for India – Guinness World Record Event (GUVI) , *GUVI Geek Networks*
Participant in a nationwide AI learning initiative recognized by Guinness World Records