Rishabh Tiwari

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Skills

Manual testing & Automation testing: TCD, RTM, UAT, DRT, JUnit, TestNG, Maven, JIRA,
Languages: Java, Python, JS

Experience

Associate Systems Engineer, IBM India Pvt. Ltd. – Pune, Maharashtra June 2022 – July 2023

- Reduced post-release defects by 15% by designing 500+ test cases and validating data integrity with SQL.
- Accelerated sprint cycles 25% with JIRA defect reports with reproducible steps and regression coverage.
- Improved defect resolution time by 18% through structured triage and close collaboration with developers.

Student Intern, Collaborative Intelligence Pvt. Ltd. – Noida, UP Jun 2021 – May 2022

- Developed and implemented computer vision systems to handle high-resolution images for object detection
- Achieved a 15% boost in detection accuracy and a 10% improvement in object detection and tracking speed.
- Enhanced prototype deliverables by integrating AI workflows into production pipelines for real-time analysis.

Projects

Selected peer-reviewed research and applied AI projects in computer vision, deep learning, and image analysis.

Deep Learning Approach for Object Detection in Satellite Imagery Expert Systems (Wiley), April 2023

- Engineered a modified YOLOv4 architecture for small-object detection in high-resolution satellite imagery.
- Boosted detection speed and accuracy by integrating TensorFlow Object Detection API into a unified pipeline.

WasteDet: Anchor-Free Detection for Waste Management IEEE CISES Conference, January 2022

- Built a novel anchor-free detection algorithm tailored for waste object recognition, outperforming anchor-based models in cluttered environments.
- Addressed real-world sustainable waste management challenges using deep learning.

Computer Vision and Deep Learning for Waste Management Systems IEEE ICACITE Conference, April 2022

- Designed deep learning model for automated waste classification, improving sorting accuracy and operational efficiency.
- Applied computer vision techniques to enhance municipal waste management workflows.

Detection of Camouflaged Drones Using Computer Vision IEEE Confluence Conference, January 2022

- Built a YOLO-based system for detecting camouflaged UAVs in complex backgrounds, enhancing surveillance capabilities.
- Addressed real-world security challenges in low-visibility environments using deep learning.

Apple Fruit Disease Detection Using K-Means Clustering Springer, October 2021

- Developed MATLAB-based tool for agricultural disease detection using image segmentation and neural networks.
- Achieved 5% accuracy gain over baseline through optimized clustering and classification techniques.

Education

Amity University – B.Tech in Electronics and Communications Engineering May 2022