Sudharsanam Y

Operations Research Analyst

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SUMMARY

Motivated entry-level professional with a strong foundation in operations research and a passion for data-driven decision-making and optimization solutions.

WORK EXPERIENCE

Software Testing Intern   Feb '25 — Jun '25
DRDO   Chennai, India

- Performed comprehensive static and dynamic code analyses using the LDRA tool, resulting in a 35% enhancement in early defect detection.
- Designed and executed over 120 test cases, leading to a 40% improvement in test coverage for vital software components.
- Identified and documented more than 50 bugs, significantly decreasing post-deployment issues by 25%.
- Worked closely with development teams to effectively implement feedback from testing, reducing integration time by 20%.
- Created extensive testing documentation, enhancing onboarding efficiency and cutting down review cycles by 15%.

EDUCATION

Master in Computer Science And Engineering, Ramanujam Computing Center, CEG, Anna University,   Jan '23 — Present
Guindy   Chennai, India

- Linear Programming: Mastery of techniques to enhance resource utilization while adhering to constraints. Non-linear Programming: Proficient in addressing problems with non-linear relationships using advanced methods. Optimization Techniques: In-depth study of various methodologies, including integer programming for complex systems. Python for Optimization: Expertise in leveraging Python for effective solutions to optimization challenges.

Bachelor in Computer Science and Engineering, P.B College Of Engineering, Sriperumbadur   Jan '19 — Jan '23
                                                                                                  Sriperumbadur, India

- Python: Advanced proficiency in Python programming, covering data manipulation and scripting techniques. Machine Learning: Competence in implementing machine learning algorithms to address real-world challenges and deliver predictive analytics. Deep Learning: Knowledgeable in utilizing deep learning frameworks such as PyTorch for creating and training sophisticated neural networks.

CERTIFICATIONS

Artificial Intelligence, IIT Research Center (Workshop)   Jan '23
CCNA Network Fundamentals, Simplilearn   Jun '24
Cybersecurity Analyst Job Simulation, TATA Forage   Aug '24
Python, Eduprep   Nov '24

ACADEMIC PROJECT

Evading Attack for DNN Based Malware Detection, Anna University Link   Aug '24 — Jan '25

- Engineered Malware Patch, a versatile adversarial attack designed to circumvent DNN-based malware detection, enhancing evasion rates by 40%.
- Developed sample-agnostic adversarial patches, allowing various malware instances to evade detection, lowering accuracy by 50%.
- Executed binary and image-based adversarial patching methodologies, successfully deceiving static and grayscale detectors with an 85% effectiveness rate.
- Assessed white-box and black-box attack strategies, boosting evasion efficiency by 30%.
- Minimized false positives by 15% while optimizing overall detection performance.

SKILLS

Project Management   Project Scheduling (PERT/CPM)
Programming   Python, Machine Learning
Technical & IT Skills   Microsoft Tools/Technologies, General IT Knowledge, Implementation Skills
Tools   SIEM, cuckoo sanbox
Testing & Analysis   Software Testing & Tools, Malware Analysis
Languages   English