

Summary

Innovative Software Engineer skilled in Python, Machine Learning (ML), and automation, with a track record of reducing processing times and optimizing systems. Proficient in **Python, Java**, and frameworks such as TensorFlow, PyTorch, and FastAPI. An **ISRO Hackathon** achiever with strong problem-solving abilities. A recognized performer in **Microsoft Office competitions and global informatics challenges**, passionate about leveraging **AI and ML** to drive business value and innovation.

Experience

Software Engineer	Tata Consultancy Services	Sept 2024 – Present
<ul style="list-style-type: none">Working on an ML model to automate data migration, reducing processing time from 20 minutes to 20 seconds / file.Automated SLA breach notifications with personalized emails using Python and NIC Server, reduced ticket resolution time to < 1 day significantly enhancing customer satisfaction.Working on a POC for a system of real-time drone location detection in high-density, populated areas.		
Software Engineer Intern	Netcore Cloud	Aug 2023 - Jan 2024
<ul style="list-style-type: none">Worked on Netcore SmartTech platform, a customer engagement and analytics solution, to detect anomalies with 95% accuracy across channels like Emails and SMS, and enabling real-time alerts via Slack integrationConducted on a POC to optimize the SmartTech analytics dashboard, demonstrating latency reduction from 10s to 3s and a 50% improvement in pipeline efficiency		

Projects

Automated Video Shot Classification	ISRO Hackathon
<ul style="list-style-type: none">Achieved 72.8% Top-3 accuracy in classifying 3611 video shots into 30 categories using YOLO and SAM.Implemented object segmentation and trained custom datasets for accurate metadata generation using FastText.Tools Used: YOLO, SAM, CUDA, OpenCV, FastText	
Intra-Video Content Searching	ISRO Hackathon
<ul style="list-style-type: none">Developed a system for searching video content based on user descriptions using CLIP and BERT for zero-shot learning.Integrated OpenCV to extract frames efficiently and provided relevant video segments to users.Tools Used: CLIP, BERT, CUDA, OpenCV	

Technologies

Languages: Python, C++, Java, SQL, JavaScript, HTML, CSS

Frameworks and Libraries: TensorFlow, Keras, PyTorch, FastAPI, OpenCV, Apache Kafka, Apache Flink, Redis, YOLO, DBSCAN, CLIP, BERT, LangChain

Tools and Platforms: AWS, Docker, Apache Tomcat, Slack, Git, GitHub, FastText, Microsoft Office Suite

Databases: MySQL, SQL Server, MongoDB, Postgress

Concepts and Methodologies: Machine Learning, Deep Learning, Data Structures and Algorithms, Object-Oriented Programming (OOP), CI/CD, NLP, Real-Time Systems, Anomaly Detection

Achievements

Microsoft Office Specialist - Excel 2016	Bronze Medalist, Secured AIR-3
Microsoft Office Specialist - Word 2016	1st Runner Up across India
International Informatics Olympiad	Olympiad Rank 16 across the globe
Crack the Code - Competitive Coding	2nd position in Inter University Competition

Education

- **Bachelor of Technology in Computer Science and Engineering**
Guru Gobind Singh Indraprastha University, Delhi
GPA: 9.2/10

2020 – 2024