Harshit Saini

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EXPERIENCE

AI RESEARCH FELLOW | IIT Ropar 08/2023 - Present

- Contributed to AI/ML projects including semi-supervised annotation tools, resulting in a 50% reduction in annotation time.
- Significantly boosted the effectiveness of Yolo models by fine-tuning parameters and implementing enhancements, resulting in a remarkable 25% increase in accuracy over conventional baseline models.

DATA ENGINEERING INTERN | Hamoye 11/2022 - 03/2023

- Successfully completed data wrangling and visualization activities for varied datasets, leading to a significant 10% reduction in the time required for data processing.
- Successfully crafted and implemented machine learning models that demonstrated impressive accuracy rates of up to 95%, thereby strengthening predictive capabilities and bolstering product performance.

EDUCATION

Bachelor of Technology - BTech, Artificial Intelligence 09/2021 - 06/2025 | Gautam Buddha Nagar
Gautam Buddha University

CERTIFICATIONS

- Machine Learning Fundamentals - Udacity (10/2023)
- Microsoft Power BI - The Complete Masterclass - Udemy (09/2023)
- AI Programming with Python - Udacity (11/2022)

SKILLS

Languages: Python, C++, SQL
Analyzing Tools: Excel, Power BI, Tableau
AI/ML Frameworks: PyTorch, Tensorflow, Autogluon, Scikit-learn
Libraries: Pandas, Numpy, Matplotlib, Seaborn
Development: Reports, Dashboards, Agile, Scrum
Other Tools: Excel, Power BI, Power Automate, Power Apps, AWS Sagemaker, ComfyUI

PROJECTS

Automatic Labelling tool

- Took the lead in orchestrating the creation of an advanced automatic labelling tool tailored specifically for annotating images to support object detection models, effectively slashing annotation time by nearly 50%.
- Implemented a forward-thinking LLM-based approach to streamline the labeling process for pre-defined objects across image datasets, yielding tangible benefits including a 25% increase in operational efficiency and significant cost savings.

Synthetic Data Generation

- Engaged extensively in Dreambooth Tuning of Stable Diffusion models, refining parameters and configurations to effectively produce data tailored for specific use cases, thereby substantially mitigating real-world data reliance by nearly 30%.
- Advanced Yolo models through intensive refinement, culminating in a noteworthy 25% enhancement in object detection accuracy when benchmarked against baseline models.
- Pioneered the incorporation of interactive visualization tools and comprehensive reporting frameworks, leading to a marked 20-25% acceleration in decision-making timelines and a reduction in the laborious task of data gathering for Machine Learning models.