Gaurav Parajuli

Färbergasse, Steyr, Austria | Email | LinkedIn | Github | Google Scholar | Website |

Research Interest

Computer Vision, Multimodal LLM, Vision LLM

Education

Johannes Kepler University   Linz, Austria
Masters in Artificial Intelligence   March 2025 - Present
Kathmandu University   Dhulikhel, Nepal
Bachelors in Mechanical and Hydropower Engineering   June 2022

Publication(s)

1. "Querying GI Endoscopy Images: A VQA Approach" **accepted** at ImageCLEFMedical at CLEF 2025.[Github]

Experience

Omdena Inc   Remote
Volunteer   Jan 2025 - Apr 2025
- Volunteered for implementation of Object Detection and Instance Segmentation model for pothole(s) detection.

Open Learning Exchange Nepal   Lalitpur, Nepal
Machine Learning Engineer   Jan 2024 – Aug 2024
- Implemented OCR algorithms to extract textual data from scanned documents and convert them to `.docx` format.
- Designed comprehensive data annotation rules, increasing Page Object Detection (POD) model precision from ~80% to 88.3%.
- Implemented tabular data extraction and table structure reconstruction from images of complex tables, achieving 87% accuracy.
- Built a custom data annotation tool for table images in PubTabNet format using PyQT.
- Created synthetic data generation scripts for various machine learning tasks.
- Reduced overall document conversion time by 55%.
- Prototyped a recommendation system for a learning platform, providing personalized content suggestions.
- Development of REST API's for ML System Backend.

Blanxer Technology Private Limited   Bhaktapur, Nepal
Software Engineer   Mar 2023 – Jan 2024
- Implemented RESTful APIs using flask and djangorestframework for seamless data exchange between server and client
- Wrote unit tests to ensure code quality
- API Documentation

Honors and Awards

1. First Position in Coding Competition organized by Kathmandu University Computer Club.

Open Source Contributions

1. Pybboxes v0.2.0: Added support for annotation file formats conversions within YOLO, COCO and VOC. [PR]

Skills

Python, Flask, HuggingFace, PostgreSQL, PyTorch, Sci-kit Learn