

Bishal Gautam

Personal Information

Address: Gründenseestraße 35, 60386 Frankfurt am Main

Nationality: Nepalese

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GitHub: https://github.com/bisalgt/

Experience

• WISSENSCHAFTLICHE HILFSKRAFT

FZI Forschungszentrum Informatik | Karlsruhe, Germany | 04.2023 - 04.2024

- Generated and shared test data for self-driving cars using CARLA and ROS2.
- Processed and Visualized 3D point cloud data (KITTI, CARLA) using Python, NumPy, Pandas, Jupyter Notebooks, and Streamlit.

STUDENTISCHE HILFSKRAFT

Frankfurt University of Applied Sciences | Frankfurt, Germany | **06.2023 - 12.2023**

Streamlined autonomous labeling pipelines for ultrasonic sensor data using machine learning and computer vision techniques, collaborating with a team to enhance data annotation efficiency.

• SOFTWARE DEVELOPER (WORKING STUDENT)

eMedicals Healthtech GmbH | Frankfurt, Germany | 08.2022 - 03.2023

- Extracted dialysis center and medication data through web scraping, built ETL pipelines, and saved in SQL database.
- Developed RESTful APIs (Django) and worked with Azure DevOps (VMs, CI pipelines).

• TECH INTERN (DATA SCIENCE)

Insightfulme GmbH | Berlin, Germany | 03.2022 - 05.2022

 Analyzed user data in BigQuery and Amazon RDS to track metrics like daily/monthly active users, retention rates, and engagement trends, while implementing tests for GitHub Workflow (CI/CD).

• SERVICE ENGINEER

East West Concern Pvt. Ltd. | Nepal | 02.2020 - 09.2021

 Delivered technical support and service for medical devices in hospitals and health institutions during the COVID-19 pandemic, ensuring seamless integration and operation.

Languages

• English: C1

• German: B2(Running)

• Hindi: C1

• Nepali: Native proficiency

IT-Skills _____

Programming: Python

Data Analysis: NumPy, PandasVisualization: Plotly, Streamlit

ML: Sklearn, Tensorflow

Web/API: FastAPI, Django

Databases: MySQL, MongoDB

Cloud: Docker, Azure, VMs

Version Control: GitHub, Bitbucket

Simulation: ROS, Rviz2, CARLA

PM Tools: Jira, Confluence

Others: Linux, Postman, Bash

Volunteering

- PyCon DE & PyData 2025
- PyCon DE & PyData Berlin 2024
- PyCon DE & PyData Berlin 2023
- Web Weekend Kathmandu 2019

• SOFTWARE DEVELOPER (PROJECT BASED FREELANCER)

Pro-Mech Minds & Engineering Services Pvt. Ltd. | Nepal | 01.2020 - 07.2020

 Developed APIs, performed web scraping, and cleaned data for the quiz app, incorporating sentiment analysis and profanity detection for user input validation.

ROBOTICS / ELECTRONICS TRAINER

Futani Technology Pvt. Ltd. | Nepal | 09.2017 - 12.2019

- Taught students robotics, developed projects, and organized exhibitions.

Education

· Master of Engineering in Information Technology

Frankfurt University of Applied Sciences | Germany | 10.2021 - 06.2024

Thesis: Enabling scenario-based testing for point cloud based vulnerable road users detection in the context of highly automated driving. – conducted at FZI Forschungszentrum Informatik, Karlsruhe

 Developed a LiDAR data augmentation method by extracting and integrating point cloud prototypes, using raycasting for realistic shadow generation, with visualization and analysis.

Projects:

- Implemented semantic segmentation and developed an autonomous labeling pipeling for ultrasonic sensor data, with visualization in a Tkinter-based GUI.
- Deployed ML application using Docker and Azure Cloud.
- Semantic Segmentation of University Surrounding using Mask-RCNN.

Final Grade: 1.6

Attended Modules: Machine Learning, Software Engineering, Cloud Computing, Image Processing, Vector Analysis, etc.

· Bachelor of Engineering in Electronics and Communication

Tribhuvan University | Nepal | **09.2013 - 09.2017**

Thesis: *IOT based Tele-Robot using Raspberry Pi.*

 Enabled remote control and monitoring of a robot via a web interface, with realtime movement control and environmental data collection.

Final Grade: 2.3