

# Sudesh Acharya



- » **Fields:** Software Development, Data Science, and Deep Learning.
- » **Stacks:** Python3, HTML5 | CSS3 | JS, MongoDB | MonetDB, Basic Rust/C.
- » **Utils:** DjangoREST, Numpy, Pandas, Matplotlib, PyTorch, OpenCV, AWS | GCP, Gymnasium, Linux, Git, Docker, ROS2, etc.
- » **Enjoys:** Knowledge-exchange, Music, Learning new stuffs, Seasonal Hobbies.
- » **Languages:** English : Fluent, German: Fluent, Hindi : Fluent, Nepali : Native

## »»» Summary

Spirited Developer ready, to offer acquired Software(Instruction, Test-driven) and Machine Learning(Data-driven) development skills and experiences, to spend effort on exciting and fulfilling projects, seeking to undertake such roles and work on innovative and SOTA solutions.

## »»» Experiences Timeline

2023.11-24.08	<b>Data Science Researcher Intern - Munich, Germany</b>	FfE e.V.
	<ul style="list-style-type: none"> <li>» Development of a Prosumer Reinforcement Learning Agent for Energy Cost Optimization.</li> <li>» Using Gymnasium and StableBaselines3 , based on PPO, SAC TD3 Algorithms.</li> </ul>	
2022.07-23.08	<b>API server Development with DjangoREST - Karlsruhe, Germany</b>	CloudFluid GmbH
	<ul style="list-style-type: none"> <li>» Development of Cloud(GCP, AWS) Interface[API] for fluid Cloud-based Simulation Service.</li> <li>» DRF based Django User Auth., Service Backend, Logging(structlog), and Testing(PyTest)</li> </ul>	
2021.10-22.03	<b>Data Analytics and Reporting - Rostock, Germany</b>	VestiFi GmbH
	<ul style="list-style-type: none"> <li>» Generation of Visualization(Matplotlib, Seaborn) and Reporting(LaTeX, Jinja).</li> <li>» Extraction( MonetDB SQL), Transformation(Numpy), and Loading(MongoDB) pipeline for wifi radio pcaps.</li> </ul>	
2021.05-22.02	<b>Lidar Data Analysis, and ETL - Kiel, Germany</b>	FuE FH Kiel GmbH
	<ul style="list-style-type: none"> <li>» Raw maritime 3D Lidar data collection and management within Kiel Förde</li> <li>» Analysis and Transformation of raw Lidar data to several point cloud formats(.pcd, .npy)</li> </ul>	
2021.(05-06)	<b>NLP/NLU Development Internship - Munich, Germany</b>	ROKIN GmbH
	<ul style="list-style-type: none"> <li>» Document Classification(tagging) with BERT and Derivatives</li> <li>» NLP based Model Development, Evaluation, Article prediction and Testing using Google Cloud Platform (GCP)</li> </ul>	
2017.(02-05)	<b>ODOO Module Programmer - Lalitpur, Nepal</b>	BI Solutions Pvt. Ltd.
	<ul style="list-style-type: none"> <li>» ODOO ERP and CRM Custom Module Development</li> <li>» Python /ORM /MVC, PostgreSQL, Scrum/Kanban Project Mgmt.</li> </ul>	

## »»» Academic Timeline

2018 - now	<b>Master's Degree</b>	FH Kiel, Germany
	<ul style="list-style-type: none"> <li>» MSc. Information Engineering ( Specialization : Intelligent Systems )</li> <li>» Statistical Machine/Deep Learning, Business Analytics, Cloud Computing, DevOps, Project Management, Requirement Engineering. etc.</li> </ul>	
2012 - 2016	<b>Bachelor's Degree</b>	RGPV University, India
	<ul style="list-style-type: none"> <li>» Computer Science and Engineering</li> <li>» Theory of Computation, Data Structures and Algorithms, Digital Circuits and System etc.</li> </ul>	

2010 - 2012	<b>High School</b>	Caribbean HSS, Nepal
	<ul style="list-style-type: none"> <li>» Major : Natural and Formal Science</li> <li>» Modern Physics, Biology, Chemistry, and Mathematics</li> </ul>	
<b>»» Personal and Academic Projects</b>		
2020 - 2021	<b>Exploration of Art Generation using Deep Generative Models</b>	PyTorch
	<ul style="list-style-type: none"> <li>» Exploration and Evaluation of Generative Models in Art Generation Domain.</li> <li>» Progressive Implementaiton and Observation on (Unconditional and Conditional ) GANs</li> </ul>	
2020 - 2021	<b>Classification of Thoractic diseases using Deep Learning</b>	Keras   Tensorflow
	<ul style="list-style-type: none"> <li>» Implementation, Optimization and Evaluation on Custom CNNs.)</li> <li>» Pre-training and Fine Tuning(Transfer Learning) using Densenet121 Architecture</li> </ul>	
2019- 2020	<b>Time Series Analysis and Forecasting for Energy Prosumption</b>	Python, R
	<ul style="list-style-type: none"> <li>» Time Series Analysis and Forecasting using Classical ARIMAs and ML algorithms</li> <li>» On an hourly energy production and consumption data from <i>energycharts.info</i></li> </ul>	
2019- 2020	<b>Model Selection,Data Exploration and Visualization</b>	Scikit-Learn
	<ul style="list-style-type: none"> <li>» High-dimensional Data Exploration: PCA, LDA, t-SNE, ISOMAP etc.</li> <li>» Model Selection, Validation and Evaluation using criterias (AIC, BIC, MDL)</li> </ul>	
2018 - 2019	<b>Classical Machine Learning Implementation</b>	Scikit-Learn
	<ul style="list-style-type: none"> <li>» Clustering, Classification, Regression: Support Vectors, Perceptron, DecisionTree, KNN)</li> <li>» Data: UCI banknote authentication, Segmentation, Mice Protein data Clustering, etc.</li> </ul>	
<b>»» Certification Courses</b>		
2020 - 2021	<b>Python for Data Science, AI and Development</b>	IBM   Coursera
	<ul style="list-style-type: none"> <li>» Fundamentals of Python Programming for Analytics</li> <li>» Data Analysis with Numpy,Pandas, Matplotlib, and Seaborn</li> </ul>	
2020 - 2021	<b>Deep Learning Specialization</b>	Coursera
	<ul style="list-style-type: none"> <li>» Deep Learning Fundamentals, Computer Vision, Sequence and Attention Models(NLP, NLU)</li> <li>» Optimization, Hyperparameter Tune/Search, and Regularization.</li> </ul>	
2020	<b>AI for Medical Diagnosis</b>	Deeplearning.ai
	<ul style="list-style-type: none"> <li>» Disease detection and classification using Convolutional Neural Networks</li> <li>» Evaluation metrics, domain challenges with medical datasets</li> </ul>	

Open Projectworks @: <https://github.com/mnpr-vcs>

