# Sudesh Acharya

**▶** Fields: Software Development, Data Science, and Deep Learning.

▶ Stacks: Python3, HTML5 | CSS3 | JS, MongoDB | MonetDB, Basic Rust.

**▶** 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, to assist develop products, facilitate services, seeking to undertake such roles and work on innovative and SOTA solutions.

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2023.11-24.08	Data Science Researcher Internship - Munich, Germany	FfE e.V.
	<ul> <li>Training and Optimiation of a Energy Prosumer RL Agent for Cost Optimiz</li> <li>Gymnasium and StableBaselines3 based Research and Development</li> </ul>	ation
2022.07-23.08	API server Development with DjangoREST - Karlsruhe, Germany	CloudFluid GmbH
	<ul> <li>Development of Cloud(GCP, AWS) Interface[API] for fluid Cloud-based Sim</li> <li>DRF based Django User Auth., Service Backend, Logging(structlog), and Text</li> </ul>	
2021.10-22.03	Data Analytics and Reporting - Rostock, Germany	VestiFi GmbH
	<ul> <li>Generation of Visualization(Matplotlib, Seaborn) and Reporting(LaTeX, Jinj.</li> <li>Extraction( MonetDB SQL), Transformation(Numpy), and Loading(Mongol wifi radio pcaps.</li> </ul>	
2021.05-22.02	Lidar Data Analysis, and ETL - Kiel, Germany	FuE FH Kiel GmbH
	<ul> <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 form</li> </ul>	
2021.(05-06)	NLP/NLU Development Internship - Munich, Germany	ROKIN GmbH
	<ul> <li>Document Classification(tagging) with BERT and Derivatives</li> <li>NLP based Model Development, Evaluation, Article prediction and Testin Cloud Platform (GCP)</li> </ul>	ng using Google
2017.(02-05)	ODOO Module Programmer - Lalitpur, Nepal	BI Solutions Pvt. Ltd.
	<ul> <li>ODOO ERP and CRM Custom Module Development</li> <li>Python /ORM /MVC, PostgreSQL, Scrum/Kanban Project Mgmt.</li> </ul>	

### **Academic Timeline**

2018 - now	Master's Degree	FH Kiel, Germany
	<ul> <li>MSc. Information Engineering ( Specialization : Intelligent Sys</li> <li>Statistical Machine/Deep Learning, Business Analytics, Cloud ( Management, Requirement Engineering, etc.</li> </ul>	•
2012 - 2016	Bachelor's Degree	RGPV University, India
	<ul> <li>Computer Science and Engineering</li> <li>Theory of Computation, Data Structures and Algorithms, Digit</li> </ul>	al Circuits and System etc.

## 2010 - 2012 **High School** Caribbean HSS, Nepal

➤ Major : Natural and Formal Science

▶ Modern Physics, Biology, Chemistry, and Mathematics

### Personal and Academic Projects

2020 - 2021	Exploration of Art Generation using Deep Generative Models	PyTorch
	<ul><li>Exploration and Evaluation of Generative Models in Art Generation Domain.</li><li>Progressive Implementation and Observation on (Unconditional and Conditional</li></ul>	) GANs
2020 - 2021	Classification of Thoractic diseases using Deep Learning Keras	Tensorflow
	<ul> <li>Implementation, Optimization and Evaluation on Custom CNNs.)</li> <li>Pre-training and Fine Tuning(Transfer Learning) using Densenet121 Architecture</li> </ul>	
2019- 2020	Time Series Analysis and Forecasting	Python, R
	<ul> <li>Time Series Analysis using Classical ML algorithms( Python/ R)</li> <li>Time Series Forecasting using Deep Learning Models(RNN/LSTM), Lib: FB-Prophet</li> </ul>	:
2019- 2020	Model Selection,Data Exploration and Visualization	Scikit-Learn
	<ul> <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	Classical Machine Learning Implementation	Scikit-Learn
	<ul> <li>Clustering, Classification, Regression: Support Vectors, Perceptron, DecisionTree,</li> <li>Data: UCI banknote authentication, Segmentation, Mice Protein data Clustering, 6</li> </ul>	

### Certification Courses

2020 - 2021	Python for Data Science, AI and Development	IBM   Coursera
	<ul><li>Fundamentals of Python Programming for Analytics</li><li>Data Analysis with Numpy, Pandas, Matplotlib, and Seaborn</li></ul>	
2020 - 2021	Deep Learning Specialization	Coursera
	<ul> <li>Deep Learning Fundamentals, Computer Vision, Sequence and Attention Mod</li> <li>Optimization, Hyperparameter Tune/Search, and Regularization.</li> </ul>	els(NLP, NLU)
2020	AI for Medical Diagnosis	Deeplearning.ai
	<ul> <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

