# Manoj Adhikari

Web: manojadhikary.com.np Github: github.com/jonamadk Medium: @manojadhikari

#### EDUCATION

•	Master of science in Computer Science : Software Engineering (GPA: 4.0) East Tennessee State University	2023 - 2025 (Expected) Johnson City, Tennessee
•	Bachelor of science in Computer Science and IT (GPA 3.68)	2016 - 2020
	St. Xavier's College: Tribhuvan University	Maitighar, Kathmandu

#### SKILLS SUMMARY

- Programming Language: Python, R.
- Database: MongoDB-NoSQL, SQL, PostgreSQL.
- Frameworks: Django REST-Framework, Streamlit, Flask, FastAPI.
- Tools & Packages: Postman, Pandas, Scikit-Learn, Swagger, Apache Airflow, Scrapy, Pytorch, BeautifulSoup, Git.
- BItools: Power BI, Tableau, AWS QuickSight.
- Cloud Environment & Platforms: Linux, Windows, AWS EC2, GCP.
- Machine Learning Skills: Regression models, Binary & Multi-Class Classification models, Clustering (K-Means, DBSCAN, HDBSCAN), Association Mining, Dimensionality Reduction, Feature Selection, Multi-laver Percepton & Convolutional Neural Network, Hyper-parameter Tunning.
- Other Skills: Microsoft Office Suite, Agile, Research.

#### PROFESSIONAL EXPERIENCE

#### Graduate Teaching Assistant, Department Of Computing (Part Time) Sep 2023 - Present East Tennessee State University Johnson City, Tennessee

• Instructing & Grading: Facilitating almost 100 undergraduate students on Using Information Technology course ( Topics - Digital Literacy, Cyber-Security, AI & Machine Learning etc). Instructing on computational thinking activities. Guiding students on soft skills projects. Reporting student's progress. Mentoring new graduate teaching assistants on effective teaching approaches and course resource management.

#### Product Data Analyst (Full-time)

Renegade Insurance

- Data Analysis (Insurance Domain) : Aided stakeholders in strategic data-driven decision making through predictive and prescriptive analysis of quotes, coverage's,and premiums using Python and SQL . Building KPI Dashboard using Power BI. Built and streamlined Python ETL data pipelines with API endpoints for multiple carriers to operate seamless data integration with Renegade System. Develop REST API documentation using Swagger.
- Data Schema Modeling: Modeled and streamlined schema of more than 15 insurance carriers heterogeneous data and optimized as per Renegade system need for full quote and quick quote service enabling high customer agent engagement. Warehoused the data.

#### Python Developer(Full-time)

BitsKraft (Formerly, DigiConnect)

• Backend Developer: Developed data portal secure REST API's using Django REST Framework. Handled data integration through ETL pipelines, Implemented multi-factor authentication, Developed dark web exploit search for analysis of data breach and security. Developed asynchronous event schedulers, & dynamic user groups, roles & permissions features.

#### **Research Scholar**

St. Xavier's College

• Crime Data Analysis: Performed time series analysis of criminal activities, and data visualization of crime hot spots of Kathmandu Valley.

#### PUBLICATIONS

- Research-Scholar/Co-author: Assessment of Criminal Activities in kathmandu Valley using KNN Classifier (Publication:Research Annals of Xavier's Nepal, ISSN:2705-456X, Issue: 2.0, 2021):
- Mini-thesis: Driver Drowsiness Detection through Euclidean distance measure- a behavioural approach. Undergraduate Mini-thesis work. St. Xavier's College:

Jan 2020 - Feb 2022

Naxal. Kathmandu

Feb 2022 - July 2023

Jhamsikhel, Lalitpur

2018-2019 Maitighar, Kathmandu

### HONORS AND AWARDS

- The Fr. Martin P. Coyne, S.J Memorial Award for Outstanding Moral Uprightness (2020): The Fr. MARTIN P. COYNE, S.J Memorial Award for outstanding moral uprightness at St. Xavier's College is given to a Student demonstrating the highest traits of the Xaverian Values of Moral Uprightness.
- Fr. Locke and Stiller Research Awardee Cycle II (2019): LSRA, referencing, Fr. Locke and Stiller Research Awardee is an annual research award program supported & presented by St. Xavier's College presented to students for their noticeable RD work, to honor the memories of Father John K. Locke, SJ (1933-2009) & Father Ludwig F. Stiller (1928-2009). More on- LSRA

#### PROFESSIONAL DEVELOPMENT

<b>Data Science Web App: Streamlit and Python</b> Build a Data Science Web App with Streamlit and Python.	Coursera view
Statistics Foundations 2: Probability Conditional probability, Multi-Event Analysis.	${f Linked In}\ view$
Statistics Foundations: The Basic Data Distribution, Descriptive Statistics, Z-score.	${f Linked In}\ view$
Students in Research Completed CITI Program Course on Human Subjects Research, Students Research.	CITI Program view
Working with BigQuery. Fundamentals of BigQuery	Coursera view
Microsoft Certified: Data Analyst Associate(2020-2021) Exam DA-100: Analyzing Data with Microsoft Power BI.	$\begin{array}{c} \text{Microsoft} \\ view \end{array}$
Data Science for Business Basics of data science for business intelligence.	$egin{array}{c} { m DataCamp} \ view \end{array}$
Introduction to Power-BI Reporting, Transforming and Learning DAX.	$egin{array}{c} { m DataCamp} \ view \end{array}$
Getting Started with Data Analytics on AWS. Unsupervised learning fundamentals	Coursera view
Machine Learning with Scikit-Learn. Build and tune predictive models and evaluate how well they will perform on unseen data	$\begin{array}{c} \text{DataCamp} \\ view \end{array}$
Unsupervised Learning in python Unsupervised learning fundamentals.	$\begin{array}{c} \text{DataCamp} \\ view \end{array}$
<b>Google Crowd source Certificate of Excellence</b> For enriching the Nepali language during Google crowd source campaign.	Google view

- Data Science Web App: Insightful web app for Motor Vehicle Collisions Data-set Visualization. Tech: Python, streamlit
- Phishing Awareness and simulation system: Simulates the phishing behaviours and aware the user. Worked on diverse tasks: One pixel phishing implementation (*read blog*), Dark web leak search, Dynamic phishing template generation, User group, Roles and Permissions, Multi-factor authentication-email/phone based OTP, Time based OTP, Data dashboard and reporting. Tech: Python, Django REST-Framework
- Driver Drowsiness Detection and Awareness System: Designed project architecture, developed drowsiness detection algorithm & server-side API's, developed android app for client side. Best listed final year project. Tech: Python, Django REST-Framework, Android, SQLite
- Image Classification: Built Hand written Digit Classification & CIFAR-10 Dataset Multi-class classification CNN models, data standardization and addition to standard dataset for model better performance for unseen data Tech: Python, TensorFlow
- Network Anomaly Detection : Classifying network behaviour using KDD Dataset using Logistic Regression, KNN, Random Forest Algorithm, Multi-layer Perceptron along with PCA implementation and with hyper-parameter tunning for optimal solution. Tech: Python, Scikit-Learn
- $\bullet$  Data Streaming project: Real time socket Engineering project with Apache Spark ~ .

## LANGUAGES

• Languages: English (Proficient, IELTS Overall Band:7 ), Nepali(Proficient)