Dibya Chudal Khanal

Irving, Texas | (469) 739-6376 | dxc5207@mavs.uta.edu | linkedin.com/in/dibyachudal

EDUCATION

The University of Texas at Arlington | Arlington, TX
Master of Science in Information Systems **December 2024**

Orchid International College | Kathmandu, Nepal
Bachelors in information management (BIM) **December 2017**

SKILLS

Databases and Bigdata: Oracle, MySQL, DBMS, Hadoop, Hive, AWS, GCP, Microsoft Azure, Apache Spark, HDP Sandbox
Programming Languages: Python (NumPy, Pandas, Scikit-learn, Matplotlib), JAVA, C, C++, JavaScript.
Tools and Software: Visualization tools (Power BI, Tableau, Virtual Box), IDE (Jupyter Notebook, Spyder, Visual Studio, Eclipse), DAS, SAS(Software), MS-Access, MS-Excel, SAP GUI.
Other: GitHub, HTML, CSS, Bootstrap and Data Structure and Algorithms.

CORE COMPETENCIES

Proficiency in statistical analysis, machine learning techniques for predictive analytics, data visualization tools, data modeling skills, expertise in database querying for data extraction and manipulation and ability to interpret complex data sets to drive actionable insights and informed decision-making.

EXPERIENCES

Graphic Designer, Eisto Technology, Nepal **September 2019 - June 2020**

- Implemented designs strategies focusing on color schemes, fonts, and typography to elevate visual appeal of creations.
- Leveraged Adobe Photoshop for image editing, logo manipulation, and refining brand assets to maintain consistency and achieve desired visual effects.
- Developed a composite image using Adobe Photoshop to enhance overall visual impact and aesthetic appeal and played a pivotal role in crafting user interface and user experience designs across diverse projects, ensuring intuitive navigation and engaging interactions for end- users.

Content manager Intern at Hariwan Municipality, Nepal **January 2018 - July 2018**

- Conducted thorough analysis of website traffic metrics and communication channels to evaluate content strategy effectiveness and utilized data-driven insights to optimize content strategies, ensuring alignment with municipality goals and customer's preferences.
- Oversaw website content management, implementing design enhancements to deliver a user-friendly experience and address customer needs effectively.
- Employed proactive measures to refine content strategies, ensuring to remain dynamic and responsive to evolving market trends and user expectations.

IT Personnel Intern at Rastriya Banijya Bank, Nepal **May 2017 - July 2017**

- Operated within E- banking, electronic cheque clearing, credit information and loan sections.
- Directed database management tasks encompassing customer accounts, transactions, and financial records.
- Spearheaded data verification, automated processes, conducted risk assessments and managed loan analytics and implemented fraud prevention measures to enhance security and mitigate risks.

INDEPENDENT PROJECT HIGHLIGHTS

Natural Language Processing: Conducted a sentiment analysis project to inform marketing strategies for a specific brand. Utilized natural language processing (NLP) techniques to analyze customer feedback and social media posts, identifying trends and sentiments. This analysis provided actionable insights, enabling the brand to tailor its marketing campaigns effectively and improve customer engagement. Demonstrated expertise in NLP, data analysis, and strategic marketing.

Graph Neural Networks: Developed a graph neural network (GNN) model to address a node classification problem, specifically classifying nodes related to Diabetes Mellitus into Type 1 and Type 2 categories. Leveraged GNNs to capture complex relationships and dependencies between nodes in the dataset, resulting in accurate and efficient classification. This project highlighted expertise in advanced machine learning techniques, specifically GNNs, and their application in biomedical data analysis.

Computer Vision: Led a computer vision project focused on image classification using deep learning techniques, specifically Convolutional Neural Networks (CNNs). Trained the model on an open open-sourced dataset to accurately predict and classify various animal species. This project demonstrated proficiency in deep learning, data preprocessing, and model evaluation, culminating in a high-performance system capable of reliable image-based animal identification.

Time Series Analysis and Forecasting: Developed and implemented a taxi traffic forecasting system to analyze customer demand and standby rate in which the system enabled company to optimize the resources effectively, enhance customer service, and prevent overstaffing, resulting in improved operational efficiency and cost savings.

COVID-19 Data Analysis: Performed an in-depth analysis of COVID-19 datasets, examining total cases, deaths, recoveries, and active cases. Identified the country's most severely affected by the pandemic. Executed thorough exploratory data analysis (EDA) to uncover critical trends and insights. Automated the analysis process to enhance efficiency and ensure reproducibility.

Uber New York Data Analysis: Administered comprehensive data pre-processing and analysis to identify key trends in Uber pickups in New York City. Determined the month with the highest number of pickups and pinpointed hourly rush periods. Analyzed Uber Base-numbers to find the most active base. Performed spatial analysis to identify pickup hotspots and conducted pairwise analysis to understand rush patterns. Automated the entire analysis process for efficiency and repeatability.

Bitcoin Data Analysis: Conducted thorough data cleaning followed by an in-depth analysis of Bitcoin price trends over time using candlestick charts. Assessed closing prices on yearly, quarterly, and monthly intervals, and performed detailed analysis of daily changes in stock closing prices. Identified key patterns and insights to support informed decision-making.

Amazon Customers Data Analysis: Implemented an in-depth analysis of Amazon user behavior to identify products with a high number of reviews and frequent users. Utilized sentiment analysis to evaluate user feedback and determine overall product satisfaction. Analyzed user interaction patterns and reviewed frequency to provide actionable insights for product improvement and marketing strategies.

Hotel Booking Data Analysis: Executed descriptive and spatial analysis of guests' hometowns to determine booking trends. Identified the locations with the highest number of bookings and analyzed guest arrival patterns. Assessed the distribution of guest arrivals to uncover key insights, facilitating targeted marketing and strategic planning.

Data Analysis of Dataline E-Commerce Company: Created comprehensive reports for a multinational company specializing in global product sales and distribution. Leveraged multiple data sources, transforming, and integrating them into a cohesive data model. Conducted in-depth analysis of product category performance, geographical sales trends, and more. Managed content in cloud-based platforms to ensure accessibility and scalability. Employed a systematic approach encompassing data preparation, modeling, visualization, analysis, and ongoing deployment and maintenance.

ACADEMIC PROJECTS

Vehicle Insurance Prediction: Led a team in analyzing vehicle insurance prediction using advanced data mining techniques, developed predictive models to refine risk assessment and premium setting, enhancing operational efficiency for insurance companies, employed comprehensive data analysis and machine learning to forecast customer behavior and optimize pricing strategies, and finally provided managerial insights for targeted marketing and optimal policy pricing.

Buil a Database for FitRITE: Identified all the necessary entities essential for constructing the Entity Relationship Model, relationship matrix, and business rules, Developed an Entity Relationship Diagram (ERD) utilizing the data, incorporating both bridge and non-bridge entities. Subsequently, leveraging the theoretical groundwork, established a database in Oracle by executing SQL queries.

Project on SAS: Developed multiple prediction models and decision models to analyze and derive insights from complex datasets, constructed predictive models to forecast outcomes and trends based on historical data, employing techniques such as regression analysis, decision trees, and neural networks, Engineered decision models aimed at optimizing business processes and strategic decision- making, utilizing algorithms like classification, clustering, and optimization, conducted rigorous data exploration, preprocessing to ensure accuracy of the model.

CERTIFICATIONS

- Data Science and Machine learning with python and GPT 3.5,
- Complete SQL Bootcamp for Data Science and Analytics,
- Power BI Certification,
- Data Structure and Algorithm Course from Udemy,
- Professional Training in Web Design and Full stack Java Developer Course.