

Yasu Paudel

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EDUCATION

University of Pennsylvania

Philadelphia, PA

Master of Science in Engineering, Data Science

School of Engineering and Applied Science: Machine Learning, Database and Information Systems, Statistics for Data Science, Big Data Analytics, Deep Learning, Artificial Intelligence, Ethical Algorithm Design

The Wharton School: Forecasting Methods for Management, Data and Analysis for Marketing Decisions, Data Mining

Christ University

Bangalore, IN

Bachelor of Science, Computer Science, Mathematics, Statistics

TECHNICAL SKILLS

Languages: Python (NumPy, Pandas, Matplotlib, Scikit-learn, TensorFlow, PyTorch), R (dplyr, tidyr, sqldf, ggplot2, caret, tseries, jsonlite), SQL (MySQL, PostgreSQL, Azure SQL Database), Apache Spark, SPSS, MATLAB, HTML, CSS, JavaScript

Technologies and Frameworks: Business Intelligence Tools(Power BI, Tableau, QuickSight, Microsoft Excel), Data Analysis, Quantitative Analysis, Causal Inference, Modeling, A/B Testing, Econometrics, ETL, Azure DevOps, Cloud, Software Development, RDBMS, Customer Experience Analysis, Operations Research, Strategy

PROFESSIONAL EXPERIENCE

Data Scientist

October 2023 – Present

Quartet Engineers

Houston, TX

- Developed Python-based ETL pipelines using Pandas and SQLAlchemy to integrate data from disparate sources into a centralized data warehouse, generating data access for analysis and reducing data preparation time by 40%
- Optimized complex SQL queries through profiling and index creation, achieving a 25% reduction in execution time and enhancing database responsiveness for efficient data analysis and reporting
- Designed data entry templates and contributed to database architecture improvements, leading to a 30% increase in overall system efficiency and streaming meaningful insights on a wide range of organizational processes

Research Assistant

September 2022 – January 2023

Mack Institute for Innovation Management

Philadelphia, PA

- Utilized web scraping techniques (LibCurl, Scrapy, BeautifulSoup) to extract and analyze network data from complex domains, uncovering valuable insights into system structures, relationships, and network dynamics
- Implemented data visualizations using Networkx and Bokeh libraries to effectively communicate complex relationships and insights to both technical and non-technical audiences, enhancing understanding of network dynamics by 60%

Data Scientist

December 2020 – July 2021

Machhapuchchhre Bank Limited (MBL)

Kathmandu, NP

- Leveraged ML expertise and big data techniques to develop and deploy 92% accurate fraud detection model, contributing to 65% reduction in manual review time by enhancing the security and efficiency of transactions
- Collaborated with the Business Intelligence team to optimize in-application SQL queries, achieving a 52% reduction in database loading time and improving overall system performance for more efficient data analysis
- Conducted statistically sound analyses and effectively communicated data-driven recommendations to stakeholders at various levels, mitigating fraud risks and improving financial security

Data Analyst

July 2020 – November 2020

Fonepay (F1Soft International Pvt. Ltd.)

Kathmandu, NP

- Collaborated with the finance team to develop interactive Tableau dashboards for real-time monitoring of key financial metrics, facilitating data-driven decision-making and leading to a 20% improvement in operational efficiency
- Optimized complex data pipelines for processing large-scale QR transaction data, resulting in a 35% improvement in processing speed and system performance and contributing to a seamless user experience

PROJECTS

Face Mask Detection | Python (torch, torchvision, sklearn, matplotlib, numpy)

May 2022

- Developed a CNN model with 97% accuracy for face mask detection, utilizing transfer learning techniques with ResNet50 and MobileNetV2

Boston Airbnb and Weather | MySQL, JavaScript, HTML, CSS

December 2021

- Collaboratively built a full-stack web application for analyzing Airbnb data and weather patterns, providing efficient access to insights

LEADERSHIP EXPERIENCE / ORGANIZATION

Python Instructor: Fife-Penn CS Academy coding club instructor for 4th - 8th graders at Penn Alexander School

Graduate Teaching Assistant: Master of Science in Social Policy: Practical Machine Learning Methods (MSSP 6080)

Graduate and Professional Student Assembly (GAPSA): Council Member

Society of Women Engineers: Collegiate member