

Yasu Paudel

571-546-9535 | yiyasup@gmail.com | [linkedin.com/in/yiyasu](https://www.linkedin.com/in/yiyasu) | yiyasu.github.io

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

PROFESSIONAL EXPERIENCE

Data Scientist

October 2023 – Present

Quartet Engineers

Houston, TX

- Improved SpectraQUEST data retrieval by identifying dependencies through MySQL, resulting in a 25% reduction in query execution time
- Designed data entry templates and re-architecture of ArcGIS to enhance overall efficiency by 20%
- Developed Python scripts for data preprocessing and worked with stakeholders to address issues with technical solutions

Research Assistant

September 2022 – January 2023

Mack Institute for Innovation Management

Philadelphia, PA

- Applied web scraping techniques with LibCurl, Scrapy, and BeautifulSoup to extract network-based data from a complex domain, conducting experiments to uncover over 400 subdomains
- Designed data visualization techniques using networkx, bokeh, and pyviz libraries to create graphical representations of links for an ecosystem and improved understanding of complex systems by 60%

Research Fellow

May 2022 – August 2022

Environmental, Social and Governance (ESG) Lab

Philadelphia, PA

- Developed and executed data frames to generate actionable insights from large complex data with 80% accuracy; obtained prioritized deliverables
- Designed, built, deployed, and improved data pipelines to leverage a cutting-edge compute cluster by creating parsers to efficiently write scraped data to .csv files, resulting in a 75% increase in research efficiency

Data Scientist

December 2020 – July 2021

Machhapuchchhre Bank Limited (MBL)

Kathmandu, NP

- Collaborated with BI team to optimize in-application SQL queries; achieving a 52% reduction in database loading time
- Built new tools for conducting statistical analysis and deployed a machine learning fraud detection model over large datasets, resulting in a 65% reduction in manual review time
- Effectively communicated actionable results by presenting data-based recommendations regarding current fraud trends with actionable recommendations to avert future incidents

Data Analyst

July 2020 – November 2020

Fonepay (F1Soft International Pvt. Ltd.)

Kathmandu, NP

- Collaborated with cross-functional teams to devise innovative technical solutions based on data, optimizing Tableau workbooks for enhanced performance and scalability
- Logged QR transactions for 18M customers and designed a solution to identify novel marketing strategies by performing trend identification for improving advertiser performance, leading to a 20% boost in strategic decision-making

PROJECTS

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

May 2022

- Integrated a precision-based CNN model with two colleagues, achieving a recognition accuracy of 97%
- Implemented trained ResNet50 and MobileNetV2 as advanced models with transfer learning

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

December 2021

- Developed an insightful full-stack web application collaboratively with three others, resulting in 40% faster access to Airbnb-weather analysis

TECHNICAL SKILLS

Languages: Python (seaborn, scikit-learn, pandas, numpy, matplotlib, scipy), SQL, MySQL, Java, R, SPSS, SAS, Tableau, Apache Spark, MATLAB, AWS, NLP, RDBMS, HTML, CSS, JavaScript, Excel

Data Science and Miscellaneous Technologies: A/B Testing, ETL, PL/SQL, API, Predictive Models, Optimization, Product Analytics, Business Strategy, Causal Inference, Software Development, Quantitative Analysis, Time Series

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