Yasu Paudel

571-546-9535 | yiyasup@gmail.com | 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 SpectraQEST 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 and executed 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 data frames to generate actionable insights from large disparate data with 80% accuracy
- 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-based fraud detection model over large datasets, resulting in a 65% reduction in manual review time
- Effectively communicated actionable results and made technical contributions by presenting data-based recommendations from insights regarding current fraud trends with 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 by executing pipelines to identify pain points and devise innovative technical solutions, leading to a 20% boost in strategic decision-making
- Implemented Tableau dashboard for the full financial plan of each potential merchant and improved system efficiency, saving 10 hours/week on manual reporting

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, API, Predictive Models, Software Development, Business Strategy, NLP, Pipeline Development, Quantitative Analysis, Time Series, Relational/Non-Relational Databases

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