Jyoti Bhandari

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West Haven, CT

PROFESSIONAL SUMMARY

An experienced self-starter results-oriented and data-driven Data Analyst and aspiring Data Scientist with about 4+ years of experience (3+ healthcare industry experience and about 1.5 years of academic experience). With a proven track record of transforming complex problems into logical frameworks and influencing cross-functional stakeholders, I bring a unique blend of quantitative analysis and strategic thinking to the table. Proficient in SQL, R, Python, Artificial Intelligence, and advanced machine learning techniques, I am well-prepared to be a part of a progressive company contributing to making the world a better place through the transformative potential of data science.

CORE COMPETENCIES:

Data Analysis:	▪ Python ▪ R ▪ Excel ▪ SPSS ▪ MATLAB
Cloud Computing	▪ Amazon Web Services (AWS EC2, EMR, S3) ▪Google Cloud Platform
Big Data Technologies:	▪ Pyspark ▪ Hadoop ▪ Databricks
Version Control:	▪ Git ▪ Bitbucket ▪ Confluence
Project management:	▪ JIRA
Machine Learning/NLP:	▪ Scikit-Learn ▪ PyTorch ▪ TensorFlow ▪ HuggingFace
Database	▪ SQL (Oracle, PostgreSQL,MySQL, SQLServer) ▪ NoSQL (MongoDB)
Data Manipulation:	▪ Pandas ▪ NumPy
Statistical Packages:	▪ SciPy ▪SAS
Visualizations:	▪ Matplotlib ▪ Seaborn ▪ Dash ▪ PowerBI
Workflow Automation:	▪ Apache Airflow
Web Development:	▪ Diango ▪Flask ▪Dash by Plotly ▪Streamlit
Shell Scripting:	▪ Linux Bash
CI/CD Tools:	▪ Jenkins ▪CircleCI

PROFESSIONAL EXPERIENCE

University of New Haven | West Haven, CT

Chief Data Scientist, Research project: Admission Model for Decision Making | August 2023 - Present

- Led a team of data analysts, data engineers, and machine learning engineers to create a scalable, and robust decision-making system for the admission process, the Admission Decision Support Model, employing statistical and analytical methods, and machine learning algorithms to achieve an 87% accuracy rate in predicting admissions decisions, 93% accuracy in student enrollment, and enhancing the efficiency of admission processes.
- Collaborate with cross-functional teams to refine key performance indicators (KPIs) for the admission process, enabling data-driven decision-making and a 25% increase in the efficiency of the admissions workflow.
- Orchestration of data workflows and automation using Apache Airflow, ensuring efficient data pipeline management.
- Implement advanced machine learning techniques, including deep learning models for the analysis of transcript images and natural language processing (NLP) algorithms, to analyze applicant profiles and transcripts, leading to an improved understanding of applicant qualifications and a 20% enhancement in GPA prediction for prospective students.
- Create and manage comprehensive work plans, meticulously monitor project timelines, and document coding and changes using version control methods in GitHub to ensure traceability and collaboration resulting in 100% on-time project deliveries.
- Create APIs to facilitate seamless interaction with the Admission Decision Support Model and manage the PostgreSQL database to ensure efficient storage and retrieval of relevant data.

Data Analyst, Admission Model for Decision Making | January 2023- May 2023

- Processed and transformed large datasets, focusing on data quality and accuracy.
- Conducted comprehensive exploratory data analysis (EDA), ad-hoc analysis, and hypothesis testing uncovering significant trends, including an annual 10% increase in fall semester application submissions, and facilitating strategic planning for admissions.
- Developed Power BI dashboards consolidating graduate admissions metrics, demonstrating the correlation between applicants' undergraduate GPAs and acceptance likelihood, empowering the admissions team with data-driven insights also contributing to a remarkable 15% increase in acceptance rates for targeted applicant segments.
- Assisted in developing business requirements, documenting procedures, and testing processes to support data-driven decision-making.

- Effectively communicate technical findings, ideas, and results to non-technical stakeholders in both written and verbal formats, ensuring clear and understandable insights.

Cotiviti Nepal Pvt. Ltd | Kathmandu, Nepal

Data Analyst I, Operations Team | February 2019-November 2021

- Conducted meticulous healthcare data analysis in the U.S. domain, encompassing eligibility, claims, prescription claims, and wellness data of many different clients and vendors including Aetna, ensuring keen attention to detail that contributed significantly to effective risk management.
- Initiated and led the design and implementation of efficient ETL pipelines, resulting in a remarkable 20% improvement in data ingestion efficiency, enhancing data collection, processing, and transfer.
- Automated solutions for identifying gaps, variances, trends, and patterns in medical data, reducing manual effort and expediting insights generation.
- Collaborated closely and communicated with stakeholders, applying a passion for problem-solving and utilizing quantitative analysis to translate their data requirements into effective solutions, supporting informed decision-making across the organization.
- Led and participated in various strategic analyses and initiatives for clients, consistently delivering data-driven insights that had a tangible impact on business operations.
- Programming in SQL, R, and Python for data analysis and reporting, presenting findings to clients in a clear and impactful manner.
- Adapted and thrived in a dynamic, ever-changing fast-paced work environment, maintaining productivity and efficiency while leading teams to meet or exceed project goals.
- Proficiency in project management tools (e.g., JIRA, Bitbucket, Confluence) and problem-solving expedited project delivery and ensured effective collaboration.
- Developed comprehensive reports and dashboards, providing insights into critical performance metrics and compliance with regulatory standards using BI tools like Tableau and MicroStrategy.

EDUCATION

University of New Haven | West Haven, CT **December 2023**
M.S in Data Science ▪ Provost Scholarship, Outstanding Graduate Student in Data Science Award 2023, GPA: 4.0
Tribhuvan University | Kathmandu, Nepal **October 2018**
B.E in Computer Engineering ▪ Dean's Scholarship, GPA: 4.0

PROJECTS: DATA SCIENCE | DATA ENGINEERING

My Health - Android Health App | Nepal

- Created "My Health," an Android app for healthcare data analysis, leveraging data from all government hospitals in Nepal, and providing disease predictions.
- Seamlessly integrated real-time health information, enhancing the user experience, and employed Python for streamlined data processing.

Data Science Job Hunting Dashboard | West Haven, CT

- Created an interactive dashboard for data science job analysis, providing 10% more accurate job market insights, and enhancing decision-making for job seekers.
- Improved job market insights accuracy by 10% through predictive analytics, enabling users to predict salaries based on industry, company type, location, and skills, as well as forecasting employee retention at different companies based on various features.

Product Recommender Chatbot Based on Visual Similarity| West Haven, CT

- Developed a Discord chatbot that recommends products from the Flipkart database based on visual similarity, utilizing a combination of a convolutional autoencoder model, K-means clustering, KNN algorithm, and VGG16 model, resulting in a substantial 30% increase in the accuracy of product recommendations.

Content Moderator | West Haven, CT

- Spearheaded an Artificial Intelligence project, Content Moderator, focused on detecting and moderating abusive text, webpage content, and audio achieving a 20% reduction in abusive content across various forms to enhance online safety.

Fine-Tuning DenseASPP for Semantic Image Segmentation | West Haven, CT

- Fine-tuned the deep learning (Computer Vision) model, DenseASPP, for semantic image segmentation, and achieved a 30% improvement in object identification accuracy through fine-tuning, also creating a mini-network.

NutriBot - Recipe Recommender | West Haven, CT

- Designed a Discord bot equipped with Natural Language Processing (NLP) capabilities, including fine-tuning the LLM BERT for NLP tasks. Enabled users to receive personalized recipe recommendations and nutritional analysis.

Other experiences: University of New Haven | West Haven, CT

Teaching Assistant, Deep Learning, and Intro to Data Science | August 2023- Present

- Facilitated learning for 55 students, providing guidance on complex deep learning concepts and data science fundamentals.
- Conducted weekly review sessions, resulting in a 22% increase in student understanding and exam scores.

Learning Assistant, Center for Learning Resources | August 2022- December 2022

- Led comprehensive data science project pipeline sessions, covering statistics, data acquisition, quality checks, preprocessing, modeling, testing, deployment, and academic paper production.
- Achieved a remarkable 45% improvement in overall student project outcomes, measured by a combination of increased project quality and successful completion rates.

AWARDS, HONORS AND MEMBERSHIP

- Microsoft Student Partner 2017
- The Trust & Safety Scholarship Program Sponsored by Cognizant Technology Solution, 2021
- Provost Scholarship, 2023
- Outstanding Graduate Student in Data Science Award 2023
- Zeta Chapter of Upsilon Pi Epsilon, International Honor Society for the Computing, and Information Disciplines Membership, 2023

LEADERSHIP

- Data Science & AI Club: Executive board member.
- Nepalese Student Association: Executive board member