

# Jyoti Bhandari

571-509-1267 | [jyotibhandarii32@outlook.com](mailto:jyotibhandarii32@outlook.com) | [LinkedIn](#) | [GitHub](#)

## PROFESSIONAL SUMMARY

An experienced data analyst and aspiring data scientist with about 4+ years of experience (3+ industry experience and about 1.5 years of academic experience) having analytical skills, and a strong track record in predictive modeling, data-driven decision-making, software development, and quantitative and advanced data analytics. Demonstrated expertise in the data science pipeline, from data collection to deployment. Proficient in Power BI, Python, SQL, and statistical analysis. Committed to translating complex data into actionable insights and fostering a culture of collaboration and continuous learning.

### CORE COMPETENCIES:

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

## PROFESSIONAL EXPERIENCE

### University of New Haven | West Haven, CT

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

- Developed an advanced Admission Decision Support Model employing statistical analysis, and machine learning algorithms (such as logistic regression, and multivariate regression) to achieve an 87% accuracy rate in predicting admissions decisions, 93% accuracy in student enrollment, and enhancing the efficiency of admission processes.
- Orchestrating data workflows and automation using Apache Airflow, ensuring efficient data pipeline management.
- Leading a team of data scientists and machine learning engineers in the creation of a scalable and robust decision-making system for the admission process, streamlining operations and reducing manual workload by 40%.
- Managed end-to-end projects from inception to completion, demonstrating project management skills.
- Collaborated 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.
- Implemented A/B testing and experimentation strategies to optimize admission-related communications and outreach, resulting in a 30% improvement in the conversion rate of admitted applicants.

#### *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.
- Assisted in the creation of admission-related KPIs, resulting in a 10% increase in the tracking of relevant metrics and improved performance measurement.
- Utilized Agile methodologies, including daily stand-ups, sprint planning, and retrospectives, to implement effective project management practices, fostering collaboration between cross-functional teams and ensuring stakeholder engagement.

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## Cotiviti Nepal Pvt. Ltd | Kathmandu, Nepal

*Data Analyst I, Data Summary Review Team | February 2019-November 2021*

- Conducted thorough healthcare data analysis in the U.S. domain, including eligibility, claims, prescription claims, and wellness data, contributing 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 healthcare data, reducing manual effort and expediting insights generation.
- Collaborated closely with stakeholders to translate their data requirements into effective solutions, supporting informed decision-making across the organization.
- Proficiently managed relational databases using SQL, optimizing queries and procedures, which led to a 15% reduction in query execution times and streamlined data processing workflows.
- Utilized Business Intelligence (BI) tools like Tableau and MicroStrategy to visualize and analyze data, enabling the generation of actionable insights.
- Leveraged Excel skills, including pivot tables and VLOOKUPS, to enhance data analysis capabilities.
- Proficiency in project management tools (e.g., JIRA, Bitbucket, Confluence) and problem-solving expedited project delivery and ensured effective collaboration.

## 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

### Walmart Sales Data Analysis | West Haven, CT

- Analyzed Walmart sales data, resulting in the creation of a predictive model. The model achieved a 15% improvement in sales prediction accuracy, significantly optimizing inventory management. Deployed the predictive model using Flask API.

### 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

- Led the process of fine-tuning the DenseASPP model for semantic image segmentation, specifically targeting three classes: roads, trees, and buildings, and achieved a 30% improvement in object identification accuracy through fine-tuning.
- Successfully created a mini network of DenseASPP for semantic segmentation of images around the University of New Haven, resulting in improved object recognition and segmentation capabilities for campus images.

### NutriBot - Recipe Recommender | West Haven, CT

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

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

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## *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**

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- 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**

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