

# Jayesh Bhadane

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## EDUCATION

**MS, Data Science** | *University of Connecticut, Storrs, USA* | GPA: 3.78/4.0 Aug 2023 - Dec 2024  
**Bachelor of Engineering, Computer Science** | *University of Mumbai, India* | GPA: 3.0/4.0 Sep 2016 - May 2020

## TECHNICAL SKILLS

- **Languages & tools:** Python, R, SQL, Azure, AWS, Tableau, PowerBI, IBM SPSS, DataBricks, PySpark, PyTorch, GitHub, Hadoop.
- **Frameworks:** Pandas, NumPy, Matplotlib, Rshiny, Plotly, ggplot2, Scikit-Learn, StatsModels, XGBoost, TensorFlow, Keras.
- **Skills:** Logistic Regression, Linear Regression, Clustering, GLMs, Decision Trees, Dimensionality Reduction, Deep Learning, Hypothesis Testing, Time Series Analysis, Statistical Analysis, Statistical models, NLP, Generative AI, A/B Testing.

## EXPERIENCE

**University of Connecticut - Data Science Research Assistant, Storrs, Connecticut** Nov 2024 - Present

- Scraped and digitized historical whaling records using web scraping and OCR, improving data accessibility by 40% and enabling analysis of unfair insurance practices contributing to the industry's decline.
- Analyzed deduplicated voyage records to evaluate the influence of crew race on outcomes, uncovering socio-demographic impacts on industry practices and results.

**Aurora Engineering - Data Science Intern, Willimantic, Connecticut** Aug 2024 - Dec 2024

- Applied advanced machine learning techniques to accurately estimate missing or corrupted data points in NASA's MMS flight data and analyzed the moments of the predicted data, improving data reliability by 30%.
- Calculated pitch angles from MMS flight data, providing critical insights into particle dynamics and their interaction with magnetic fields in space.

**C5i (Formerly Course5 Intelligence) - Research and AI Team, Mumbai, India** Oct 2022 - Aug 2023

- **Senior Data Scientist**

- Achieved a 15% improvement in forecasting accuracy and a quarterly revenue increase of \$84M by implementing Granger causality tests and a VAR model to predict Disney+ OTT signups.
- Boosted campaign targeting efficiency by 26% by delivering actionable customer segmentation insights using advanced clustering algorithms such as KMeans, Hierarchical, and KMedoids to analyze behavioral and attitudinal data.
- Enabled real-time personalization and improved marketing activation by developing dynamic classification tools for customer personas and validating segmentation strategies through statistical testing.
- Empowered junior team members to execute end-to-end analytics by conducting training sessions on data-driven marketing strategies, enhancing their ability to optimize marketing effectiveness.

- **Data Scientist** Apr 2021 - Sept 2022
- Enhanced customer retention and engagement by 18% by leading customer analytics initiatives for multiple Fortune 500 brands through key driver models, A/B testing, causal inference, and marketing attribution models.
- Improved targeted campaign effectiveness and ROI by 20% by identifying latent variables with factor analysis, integrating these insights into segmentation models to enhance cluster precision and streamline marketing strategies.
- Optimized retention strategies by 15% as measured by increased customer engagement, by engineering CHAID decision-tree models to analyze customer satisfaction data and uncover key drivers of brand loyalty.

- **Junior Data Scientist** Oct 2020 - Mar 2021
- Performed univariate and multivariate EDA to identify trends and relationships within complex datasets through meticulous data visualization and statistical analysis.
- Accelerated campaign performance analysis by reducing data aggregation time from hours to minutes by automating marketing data pipelines and reporting processes with Python.

## ACADEMIC PROJECTS

- **Regional Conversion Testing (UConn):** Designed an A/B testing framework to evaluate conversion rate differences in geospatial marketing campaigns, improving conversion rates by 20% and optimizing strategies for UConn's student union hall.
- **Capstone Project (Indeed Jobs):** Developed predictive models for Indeed's job apply starts, using ~3.5M job postings to boost applications by 27% and identify key predictors, enabling advertisers to refine listings and optimize spending.
- **CodeHelper using MistralAI:** Created CodeHelper, an AI assistant using Hugging Face and Streamlit, reducing error resolution by 35% for bioinformatics students. Improved code quality and productivity across 1,200+ use cases.

## ACHIEVEMENTS

- **Travelers Insurance Case Competition 2023:** Secured first place in a Kaggle competition by developing a frequency-severity model using generalized linear models to predict claim costs. Conducted risk segmentation, improving risk classification accuracy by 25% and optimizing pricing strategies.
- **Star of the Quarter:** Awarded Star of the Quarter twice at C5i for exceeding role expectations.
- **Publication:** Object Detection using Hausdorff distance (<https://www.irjet.net/archives/V7/i4/IRJET-V7I416.pdf>)