# RAGHAV BAJAJ

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# LinkedIn | GitHub | Website

### **SUMMARY**

Data-driven problem solver pursuing a Master's in Statistics-Data Science at Rutgers. Experienced in building ML models, optimization algorithms, and analytics solutions for credit risk, healthcare, and AI game engines.

#### **EDUCATION**

## Rutgers University, New Brunswick

Master's in Statistics - Data Science

**GPA: 3.75/4** Expected: May 2026

Related Courses: Data Structures and Algorithms, Probability and Statistical Inference, Regression and Time Series Analysis, Financial Data Mining, Data Wrangling and Husbandry, and Statistical Models and Computing.

### Government College of Engineering, Amravati

Bachelor of Engineering in Information Technology

GPA: 8.18/10

August 2017 – July 2021

#### TECHNICAL SKILLS

• Languages: Python, R, SQL, HTML, CSS, JavaScript

• Libraries/Tools: PyTorch, Tensorflow, NLTK, SpaCy, Pandas, NumPy

• Frameworks: Django, React, Node.js

• Databases: MySQL, MongoDB

Cloud/DevOps: AWS

#### WORK EXPERIENCE

## LuckyCX.com | Python | Django | NLTK | Pandas | Tensorflow / Data Analytics Intern, Remote

July 2023 - January 2024

- Launched a marketing feature for targeted promotional emails and messages, increasing user engagement by 15%. Utilized Django, MySQL, and Python libraries like Tensorflow, DeepFace, and Librosa.
- Customized user sentiment reports by demographics using NLTK and SpaCy, contributing to the acquisition of 6 new customers in 3 months, expanding the base from 30 to 36.
- Generated customer reports using feedback, sentiment analysis, and other filters to provide actionable insights, increasing click-through rates for customers by an average of 7%.

## Tata Consultancy Services Ltd. | React | JavaScript | AEM / System Engineer, On-site(Bengaluru)

July 2021 - January 2023

- Collaborated with 3 cross-functional teams as a front-end developer, focusing on accessibility using React and AEM.
- Developed and launched new features during a company-wide transition for AIG Inc., earning recognition for resolving accessibility issues with a 98% WCAG compliant micro-sites.
- Administered and optimized broker and customer dashboards, and the book of business micro-site for AIG with a 100% on-time delivery rate, enhancing operational efficiency.
- Designed and implemented key components for the AIG Annuities website in partnership with DBP, improving functionality and user experience.

### **PROJECTS**

## Supply Chain Resilience due to Earthquakes in TSMC | Python | NER | Web Scraping

April 2025- May 2025 | GitHub

- Scraped and processed 63+ news articles using Python (BeautifulSoup + Bing News) and performed Named Entity Recognition (spaCy) to extract earthquake-related supply chain disruption data.
- Merged 5 datasets spanning 20+ quarters (2020–2025), including TSMC stock prices, USGS earthquake data, and earnings call transcripts, enabling time series analysis of market reactions to seismic events.
- Identified a 12–20% decline in TSMC's stock price during Q2/Q3 2022, correlating with 6.2 and 6.7 magnitude earthquakes, providing quantifiable evidence of earthquake-induced market volatility.
- Visualized stock price fluctuations across 20 quarters, annotating 30+ key seismic and corporate events, delivering a comprehensive trend analysis that revealed 2–3 quarter recovery cycles post-earthquake disruptions.

# Hitwicket | Python | MS Excel | Pandas | NumPy / Game Strategy Analyst

April 2024 - July 2024

- Led a strategic alliance to a top 5 finish out of 60 alliances in the Hitwicket strategy game, improving from 12th place in the previous edition.
- Gathered and pre-processed data using Google Forms and in-person questionnaires, filtering key attributes to develop a targeted strategy, strategically refining the dataset by approximately 30%.
- Crafted a real-world strategy focused on optimizing team structure, boosting, and player balance.
- Leveraged Python tools such as Pandas, NumPy, and Matplotlib, along with Excel, to conduct in-depth performance analysis and make data-driven decisions. The optimization led to 40% elevation in performance metrics and a 60% improvement in ranking.

### **CERTIFICATIONS**

# Supervised Machine Learning, Stanford, Coursera,

July 2023 - August 2023

# Data Analytics, Google, Coursera

May 2023 - August 2023

## WORKSHOPS

- Taught Python and Mathematics as an instructor at CaniTech.
  - July 2021 September 2021
- Hosted a Deep Learning Workshop at GCoE, Amravati.

February 2024