www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

Vol. 2 No. 3 (October) (2024)

A Global Analysis of Netflix Content Production Unveiling Dominant Countries and Industry Trends

Taimoor Tahir Software Engineer, OSF DIGITAL. Email: taimoortahirahmad@gmail.com

Khawaja Qasim Maqbool Dept. of Computer Science, Bahria University Lahore Campus Email: qasim@bahria.edu.pk

Sayam Zafar Senior Software Engineer, GoPython Software LLC Email: sayam6336@gmail.com

Muhammad Zulkifl Hasan (Corresponding Author) Department of Computer Science, Faculty of Information Technology, University of Central Punjab Lahore Pakistan. Email: zulkifl.hasan@ucp.edu.pk

Muhammad Zunnurain Hussain Dept. of Computer Science, Bahria University Lahore Campus Email: zunnurain.bulc@bahria.edu.pk

Muhammad Atif Yaqub Department of Computer Science, National College of Business Administration and Economics, Lahore, Pakistan. Email: atif.yaqub@ue.edu.pk

Abstract

This study is a comprehensive cross-country survey of Netflix content production to identify the dominant countries developing the global catalog of the streaming platform. Rich dataset with show and movie descriptions, release year, production channel, observation, and original condition. Data collection, cleaning, and analysis of content levels, mode of distribution, temporal trends, number of views, and balance of original and licensed content are all part of the methodology. This study uses statistical methods and data visualization techniques to provide a nuanced view of the content landscape, implications for Netflix's global strategy, and recommendations for future operations. For recommendations, the machine learning model has also been applied in the research article. It includes a systematic analysis of Netflix content, which contributes to a better understanding of the role of various states in shaping the platform's diverse and dynamic offerings.

Keywords: Netflix, Data analysis, Data Visualization, EDA, Cross Country analysis, Genre Distribution

Introduction

The Boom of the media streaming platforms has revolutionized the way data has been studied and analyzed. This study sets out to investigate the vast world of Netflix data, looking into the broad web ecosystem and data harvesting techniques. It is

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)

fascinating to see the transformative impact of data-driven strategies within the film industry. The impact of factors such as genre, top countries, and stars has deeply influenced a film's popularity. The study also recognizes the emergence of unconventional factors such as YouTube views, social media likes, and fan engagement as one of the main factors of film success.

Without a doubt, Netflix is one of the most streamed sites with thousands of TV shows and movies with vast genres targeting different age groups. Netflix heavily relies on algorithms to examine user interests and monitor the content users are streaming daily by watching patterns, genre preferences, and even the impacts of social media participation on the success of a show or movie. Our analytics provides decision-makers with valuable measurements, insights, projections, and analytic tools, allowing everyone to excel in their role (Amatriain, 2022). Each click, pause, and resume is observed and recorded in Netflix's content strategy. Netflix evaluates trends, patterns, and viewer preferences using machine learning and big data analytics, directing decisions on which genres to explore, what sort of original material to generate, and even how to effectively market new releases.

Apart from this, Netflix also collects personal data. This data may include the devices you use, and on your local network, your IP address, interactions with advertising, your approximate location at each login, and other information (Angove, 2022).

While worldwide subscription numbers and viewership data are important, the platform also recorded user ratings and the content's cultural influence. Overall, this research paper's exploration of data-driven strategies in predicting movie success finds resonance in Netflix's paradigm. When combined with the streaming service's extensive big data analytics capabilities, it explains why Netflix is so accurate at recommending what to watch next. In a broader sense, Netflix's data-driven strategy informs the television series it commissions (Bhatnagar, 2022) The platform's innovative use of algorithms, machine learning, and big data analytics underscores the symbiotic relationship between data science and the art of storytelling. Netflix's ability to navigate the complexities of viewer preferences, cultural nuances, and emerging trends exemplifies the transformative power of data in shaping the future of digital entertainment.

We have also incorporated a machine-learning model. This model includes three regression models: linear regression, random forest, and gradient boosting. Users may enter their favorite movie, and the machine learning system will propose 5 movies that are similar to it. The performance of our regression models is evaluated using the Model Mean Squared Error, ensuring the accuracy and reliability of the recommendations.

Section 2 of this paper immerses us in a retrospective analysis of prior research endeavors dedicated to predicting movie success. By surveying the landscape of existing literature, the study seeks to build upon the foundations laid by predecessors and identify gaps that warrant further exploration. This contextualization serves as a crucial backdrop for the subsequent sections, offering a comprehensive understanding of the evolving methodologies and findings in the realm of film success prediction.

Section 3 of the research method delves into the tools and methods for extracting and analyzing relevant information from data sets. This section serves as an introduction to the complexities of data mining, modeling, and machine learning

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)

applications. Moving on to Section 4, the paper's discussion sections investigate a variety of performance indicators that shed light on the predictive abilities of the developed models. This in-depth discussion provides concrete information to understand the robustness of each model and its constraints, as well as nuanced images of power to determine the popularity of films.

Over the years, the significance of artificial intelligence and data analytics in recognizing patterns and trends, has grown in popularity in multidisciplinary studies, such as analysis of content production.

Al Noman et al. (2024) echo these sentiments in their work where they argue that even AI and remote sensing in water quality analysis can reveal interesting trends across various settings. With the emergence of AI powered business intelligence, these tools are being integrated into smart city governance showcasing how certain facets of urban planning could be data driven to make crises informed decisions (Rimon et al., 2024).

Observing how machine learning is applied in the healthcare industry for business purposes suggests that the technology can be deployed in a number of areas and calls to understanding how different industries are able to create and distribute what they produce (Sufian et al., 2024). Furthermore, the inclusion of quantum computing with AI is said to be a catalyst for new supply chain management practices which can then be used in understanding the patterns of global content distribution which could be the next frontier of global expansion (Mosaddeque et al., 2024).

Relatively new AI techniques such as AI short term load forecasting are great examples showcasing the power of predictive analytics and how certain predictions can be useful in more specific contexts such as forecasting demand for global entertainment markets (Ahamed et al., 2024).

The use of AI for advanced predictive analytics has integrally been associated with the healthcare industry as it saves time and provides bold UM insights which leads to a better understanding of global content production trends (Tarafder et al., 2024). As more intelligent systems such as smart grids become more integrated into the supply chain networks their optimization will expand the efficiency of international production systems (Ahamed et al., 2024).

As the journey continues in Section 5, the paper concludes with all of the findings, providing the reader with a comprehensive understanding of the research's implications. The authors conclude with a final reflection on the study's significance, discussing its contribution to the broader field of predictive research in the film industry.

Problem statement

The study fills a gap in the literature by utilizing secondary sources and internet data repositories to conduct a thorough cross-country examination of Netflix content creation. Informed decision-making for industry stakeholders and policymakers is hampered by a lack of systematic exploration. This study attempts to overcome the existing information gap in comprehending the worldwide dynamics of Netflix's content creation by identifying dominant countries and understanding the global dynamics of Netflix's content production.

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)

Methodology Data collection

The data was obtained from kaggle, a secondary source. Many other secondary sources, such as journal articles and case studies, were used to arrive at a conclusion and construct an analytical framework.

Dataset description:

The dataset is made up of 8807 rows and 12 columns. Show_id, title, director, cast, country, date_added,release_year,rating,duration, listed_in, and description are among the columns. The country and release year columns are the main focus. Our main goal is to find films that are generating the most content on Netflix.

Exploratory Data Analysis:

Data is analyzed and visualized using EDA. We used bar, pie, and line charts to better represent the data. This paper provides a country wise and genre wise analysis of the data set.

Machine Learning based Recommendation System:

- Separate the data set into training and testing portions in order to assess the recommendation system's effectiveness.
- Singular value decomposition (SVD), matrix factorization, and deep learning techniques like neural collaborative filtering have all been used in collaborative or content filtering.
- Adjust the model's parameters to your satisfaction and track its effectiveness with suitable metrics like Precision-Recall or Mean Squared Error (MSE).

Research Flow



www.thedssr.com



DIALOGUE SOCIAL SCIENCE REVIEW

ISSN Online: 3007-3154 ISSN Print: 3007-3146

Vol. 2 No. 3 (October) (2024)

Many studies have been conducted in the past to predict movie patterns using a variety of sources. Vadloori and Sanghishetty (2021) researched Netflix data using an EDA approach to gain useful insights. They created a masked and unmasked word cloud based on the relevance of genera in the dataset. They used plotting, correlation, and various other tools to extract insights from the dataset that can be used to make key business decisions.

Lotz et al. (2023) used numerous data visualization tools to comprehend the streaming industry in terms of its cultural implications; they also investigated the technologies that can be applied to this industry. Their primary focus is on analyzing streaming offerings outside of the United States. The analysis aids in understanding streaming services in the global dynamic by taking into account features such as content strategies, preferences, and so on.

Fouladirad et al. (2018) investigate the role of machine learning and algorithms in today's digital land escape. The author emphasizes the importance of advanced tools in today's digital world. Companies rely heavily on advanced algorithms for decision-making, which increases market competitiveness. The primary focus is on Netflix data and its data science approach. In this era,Netflix has distinguished itself through initiatives such as the 2012 predictive algorithm challenge with a substantial prize. They use Netflix's innovation as an example of effective data utilization for strategic advancement.

Xie and Aurisset (2016) focus on improving the sensitivity of controlled experiments for product decisions in businesses. The paper investigates various methods for reducing sampling variance. Netflix uses a variety of strategies to increase sensitivity and make better production decisions, such as researching new user engagement metrics, leveraging offline experiments, interleaving-based experiments, and more sophisticated experimental designs.

In recent years, energy management frameworks have gained significant attention due to their importance in shaping the future outlook of various sectors, with particular focus on their role in overcoming challenges faced by emerging economies, such as those impacting global content production. Additionally, the increasing volume of Internet of Things (IoT) data has sparked discussions on building scalable data management systems, a critical consideration for industries like streaming, where efficient data handling is essential for content distribution across different countries. Meanwhile, advancements in database technologies, particularly in the optimization of storage engines, are pivotal in ensuring resource utilization efficiency, a factor that is directly relevant to the infrastructure supporting international content libraries like Netflix. Furthermore, the growing significance of AI in the detection and mitigation of cybersecurity threats is highly relevant to content production platforms, as they require robust systems to safeguard data and intellectual property across borders. Lastly, the integration of hybrid blockchain technologies has emerged as a promising solution for enhancing trust and transparency, critical factors for the verification of content ownership and licensing in global streaming ecosystems.

Karin (2022) investigates the strategies that Netflix used to transition from being a technology-driven company to embracing its identity as an entertainment company. This transformation highlighted the significance of using big data as the ultimate decision-making tool. The author investigates Netflix's portrayal of big data in public

www.thedssr.com



DIALOGUE SOCIAL SCIENCE REVIEW

ISSN Online: 3007-3154 ISSN Print: 3007-3146

Vol. 2 No. 3 (October) (2024)

inquiry and communication, as well as how these positions shape broader debates about technology and decision-making. Overall, the author examines Netflix's transition solely on A more nuanced approach to data-driven affairs that acknowledges the value of data and human knowledge and sheds light on the challenges and limitations of such a separation in understanding technological progress within and across the business.

Erdogan (2023) explores Netflix's unique position in the digital space, emphasizing its reliance on machine learning, as well as personal and cultural influences from around the world It focuses on Netflix's growth during Covid-19, as well as how technology is used to understand and engage its audience. The study provides useful insights for effective implementation and academic understanding of the company's strategies and influence by discussing Netflix's new strategies and their potential impact on competitors and businesses.

According to Amatriain (2013), the Netflix Awards focused on predicting movies, simplifying the recommendation problem. In contrast, an effective recommendation system necessitates the use of algorithms and data to validate a wide range of relevant, popular, interesting, and proven recommendations, as well as innovation, variety, and innovation.

In domains such as video streaming, the goal is to increase the likelihood that a user will choose a product and be satisfied enough to return. It is critical to achieve this goal by utilizing all available data, from user interfaces to content metadata. More data leads to better results, but it necessitates well-designed models, appropriate metrics, and scalable planning processes.

The growing accessibility of data sources has created new research opportunities. User experiences improve as personalization algorithms advance. However, the problem of recommendation remains unsolved, as do many untapped opportunities and lessons.

Rostogi et al. (2023) discuss Netflix. Netflix, which has approximately 220.67 million paying subscribers worldwide, credits its success in part to its early adoption of machine learning. Artificial intelligence, specifically AWA technology, enables Netflix to easily select themed shows, saving time in the process. It is a complicated process that includes frame annotation, dividing scenes into smaller pieces with "Archer," and generating metadata with image recognition algorithms. Choosing the best image for the headline involves three major considerations: identifying key figures, assessing the image's beauty using contextual metadata, and excluding sensitive elements such as violence or nudity. Furthermore, the system aims to provide visual diversity by curating different types of images for captions based on heuristic variables such as shot type, visual similarity, color, and salient tone maps.

Results and Discussion

In this section, we will present our paper's experimental results using machine learning. Table 1 depicts all of the missing values in the dataset. Columns, cast, country, and director have missing values that have been dropped.

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)

| | Missing |
|--------------|---------|
| Values | |
| show_id | |
| 0 | |
| type | |
| 0 | |
| title | |
| 0 | |
| director | |
| 0 | |
| cast | |
| 0 | |
| country | |
| 0 | |
| date_added | |
| 0 | |
| release_year | |
| 0 | |
| rating | |
| 0 | |
| duration | |
| 3 | |
| listed_in | |
| 0 | |
| description | |
| 0 | |

Table 1 Missing values in the Dataset

Figure 1 depicts the total number of films and television shows produced since 1925. It demonstrates that the trend of producing films outnumbers that of producing TV shows.



Figure 1 Pie chart of movies and Tv shows



www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)

Figure 2 depicts the distribution of films and television shows by country. The United States is the country with the most content. While India is ranked second, Egypt is ranked last.



Figure 2 Top Countries with the highest number of movies and TV shows.

Figures 3 and 4 show the movie and television shows separately, with the United States outnumbering all other countries. The United States produces the most content. The US has produced 2498 movies whereas 1151 TV shows have been produced by the US.



Figure 3 Bar Plot of Top Ten countries with the most number of movies produced

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)

TOP TEN COUNTRIES WITH THE HIGHEST NUMBER OF 'TV SHOWS'



Figure 4 Bar Plot of Top Ten countries with the most number of TV shows produced

Figure 5 depicts the evolution of content over time. Netflix has added the most content in 2019. It could be due to COVID-19 because all cinemas are closed during that time and most content is released on OTT platforms.



Figure 5 Bar chart of content added over years

Figures 6 and 7 depict the content produced by TV shows and films separately. The year with the most films released was 2019, while the year with the most TV shows released was 2020.



Figure 6 Bar Chart of Movies added over years

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)



Figure 7 Bar Chart of TV shows added over the years

Figure 8 depicts the Netflix content distribution by genre. Netflix produces the most adult content, followed by teen content. In comparison to adult or teen content,



there is very little produced for children.



Figure 8 Pie Chart of Genre-wise distribution

Figure 9 employs the content present in the movies .

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)



Figure 9 Pie Chart of content present in movies



Figure 10 Pie Chart of content present in TV shows

Recommendation system using Machine learning :

The user's selected movie was shown as the top 5 films connected to it via a contentbased recommendation system. It created a content similarity matrix for useful recommendations by taking into account variables like target audience, country of origin, and genre.

The figure 11 shows the top five recommendations for the movie Blood & Water.

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)



Figure 11 recommendation system based on content

Regression models:

| Model | Mean Standard Error |
|-------------------|---------------------|
| Linear Regression | 1.071747e-28 |
| Random Forest | 1.366402e-03 |
| Gradient Boosting | 5.719204e-04 |

Linear Regression:

MSE= 1.071747e-28

The MSE for linear regression is really near to zero. This shows that the model works really well and that the anticipated and actual numbers are nearly the same. This suggests that either the analytic procedure is flawed or the model is overfitting the data and capturing noise.

Random Forest:

MSE= 1.366402e-03

Although it is higher than that of the linear regression model, the random forest model's MSE is still quite low. This suggests that, with comparatively small average errors, the random forest model is producing predictions that are fairly accurate. When it comes to data, the model could be able to identify more intricate patterns than linear regression.

Gradient Boosting:

MSE= 5.719204e-04

Out of the three models, the Gradient Boosting model has the lowest mean square error (MSE). This indicates that there are only minor squared discrepancies between the average predictions made by the Gradient Boosting model and the actual values. Complex relationships in data are usually successfully captured by gradient

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)

boosting, and improved prediction performance is indicated by a smaller mean square error (MSE).

To sum up, according to the MSE values:

The linear regression model has the smallest margin of error; yet, a narrow margin of error can cause potential problems, like overfitting or experimental design mistakes, to be overestimated.

Gradient Boosting outperforms Random Forest in terms of MSE, however both models are still reasonable despite having higher mistakes.

Conclusion

Finally, our cross-country examination of Netflix content production has offered useful insights into the distribution and evolution of films and television series in various nations. The findings highlight the United States as the largest contributor of Netflix content, with India close behind and Egypt in the bottom ranks. Our analysis of the temporal development of material indicated a significant increase in Netflix additions in 2019, which might be related to the worldwide impact of the Covid-19. With the closure of cinemas during this time, there was a considerable shift towards content release on OTT platforms, which contributed to the observed increase in Netflix's content collection.

More content categorization into films and television shows found intriguing tendencies. 2019 was the year with the most film releases, while 2020 was the year with the most TV programme production. This detailed grasp of temporal dynamics contextualizes the oscillations in overall content additions. Figure 9, which depicts Netflix content distribution by genre, reveals the platform's content preferences. Notably, Netflix tends to prioritize adult-oriented content, closely followed by teenoriented content. In contrast, children's material is quite restricted, highlighting potential areas for expansion or diversity in response to changing viewing demographics.

While our analysis sheds light on prominent nations and historical trends, it has limits. The reliance on publicly available data, as well as the dynamic nature of the streaming sector, make full data coverage difficult. Furthermore, the socioeconomic and cultural aspects driving content generation need additional investigation. The findings suggest that stakeholders in the entertainment business might use this study to guide strategic decisions. The United States' supremacy shows its enduring influence, while the spike in content throughout 2019 and 2020 underscores streaming platforms' agility in reaction to foreign concerns.

Understanding the spatial and temporal dynamics of production is critical for both content makers and users as the streaming content market evolves. This study adds to the ongoing discussion about the worldwide impact of streaming platforms and lays the groundwork for future investigations into the numerous dynamics affecting the entertainment environment.

Lastly, the machine learning model includes three regression models: linear regression, random forest, and gradient boosting. Users may enter their favorite movie, and the machine learning system will propose 5 movies that are similar to it.

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)

Future Research Directions

While our study gives useful insights, there are opportunities for future research to further our understanding of the dynamics of Netflix content development. Possible research areas include:

Analysis of Content Production: Look at the reasons that contributed to the increase in content production seen in 2019, particularly the influence of the Covid-19 epidemic on release tactics and consumer behavior

Detailed Genre Analysis: Conduct a more detailed examination of content genres, going into subcategories within the larger genres discovered. This might reveal complex patterns and preferences that are now disguised by high-level classification. Cultural impacts on Content: Investigate the cultural impacts on content production, going beyond quantitative measurements to analyze qualitatively how cultural elements determine the themes and narratives found in Netflix originals from various nations.

Children's Content Trends: Look at the causes for Netflix's producing less content for children. Understanding audience preferences, potential legal issues, and commercial demand for family-friendly material might all be part of this.

Acknowledgments

The department deserves heartfelt thanks for their invaluable assistance and support throughout this study effort. Their input has been crucial in determining the course and result of this study. The project research supervisor, Dr. Zulfiql deserves a big thanks for his consistent support and direction. He has contributed significantly to the research design, data analysis, and results in interpretation with his knowledge, insights, and encouragement. He provided continuous feedback and helpful criticism, which helped me with my research techniques and raise the caliber of this work. Immense thanks to the Department of Humanities and Social Sciences for offering the facilities and resources essential for their excellent ideas.

References

- Amatriain, Xavier. "Big & Personal: Data and Models behind Netflix Recommendations." Proceedings of the 2nd International Workshop on Big Data, Streams and Heterogeneous Source Mining Algorithms, Systems, Programming Models and Applications - BigMine '13, 2013, https://doi.org/10.1145/2501221.2501222.
- Angove-Plumb, Alex. "Does Netflix Track Your Personal Data?" *CHOICE*, 24 Oct. 2022, www.choice.com.au/consumers-and-data/data-collection-and-use/how-your-data-is-used/articles/does-netflix-track-your-personal-data-and-information.
- Bhatnagar, Deshak. "OTT (Netflix) Film Recommender System Using Data Mining." *Proceedings of Third International Conference on Communication, Computing and Electronics* Systems, 2022, pp. 1–10, https://doi.org/10.1007/978-981-16-8862-1_1. Accessed 24 May 2022.
- J. I., O. Anwer and A. Saber, "Management Framework for Energy Crisis & Shaping Future Energy Outlook in Pakistan," 2023 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT),

www.thedssr.com



DIALOGUE SOCIAL SCIENCE REVIEW

ISSN Online: 3007-3154 ISSN Print: 3007-3146

Vol. 2 No. 3 (October) (2024)

Amman, Jordan, 2023, pp. 312-317, doi: 10.1109/JEEIT58638.2023.10185730.

- A. Nuthalapati, "Building Scalable Data Lakes For Internet Of Things (IoT) Data Management," Educational Administration: Theory and Practice, vol. 29, no. 1, pp. 412- 424, Jan. 2023, doi:10.53555/kuey.v29i1.7323.
- Nadeem, N., Hayat, M.F., Qureshi, M.A. et al. Hybrid Blockchain-based Academic Credential Verification System (B-ACVS). Multimed Tools Appl 82, 43991– 44019 (2023). https://doi.org/10.1007/s11042-023-14944-7
- J. I., T. A. Khan, S. Zulfiqar and M. Q. Usman, "An Architecture of MySQL Storage Engines to Increase the Resource Utilization," 2022 International Balkan Conference on Communications and Networking (BalkanCom), Sarajevo, Bosnia and Herzegovina, 2022, pp. 68-72, doi: 10.1109/BalkanCom55633.2022.9900616.
- Suri Babu Nuthalapati. (2023). AI-Enhanced Detection and Mitigation of Cybersecurity Threats in Digital Banking. Educational Administration: Theory and Practice, 29(1), 357–368. https://doi.org/10.53555/kuey.v29i1.6908
- Lotz, Amanda D, and Oliver Eklund. "Beyond Netflix: Ownership and Content Strategies among Non-US-Based Video Streaming Services." International Journal of Cultural Studies, 3 Sept. 2023, https://doi.org/10.1177/13678779231196314.
- Maddodi, Srivatsa, and Krishna Prasad K. "Netflix Bigdata Analytics the Emergence of Data Driven Recommendation." Papers.ssrn.com, 21 Oct. 2019, papers.ssrn.com/sol3/papers.cfm?abstract_id=3473148.
- Netflix. "Netflix Research." Netflix.com, 2019, research.netflix.com/researcharea/analytics.
- Abdullah Al Noman, Md Tanvir Rahman Tarafder, S. M. Tamim Hossain Rimon, Asif Ahamed, Shahriar Ahmed, and Abdullah Al Sakib, "Discoverable Hidden Patterns in Water Quality through AI, LLMs, and Transparent Remote Sensing," *The 17th International Conference on Security of Information and Networks (SIN-2024)*, Sydney, Australia, 2024, pp. 259–264.
- S. M. T. H. Rimon, Mohammad A. Sufian, Zenith M. Guria, Niaz Morshed, Ahmed I. Mosaddeque, and Asif Ahamed, "Impact of AI-Powered Business Intelligence on Smart City Policy-Making and Data-Driven Governance," *International Conference on Green Energy, Computing and Intelligent Technology (GEn-CITy 2024)*, Johor, Malaysia, 2024.
- M. A. Sufian, Z. M. Guria, N. Morshed, S. M. T. H. Rimon, A. I. Mosaddeque, and A. Ahamed, "Leveraging Machine Learning for Strategic Business Gains in the Healthcare Sector," 2024 International Conference on TVET Excellence & Development (ICTeD-2024), Melaka, Malaysia, 2024.
- A. I. Mosaddeque, Z. M. Guria, N. Morshed, M. A. Sufian, A. Ahamed, and S. M. T. H. Rimon, "Transforming AI and Quantum Computing to Streamline Business Supply Chains in Aerospace and Education," 2024 International Conference on TVET Excellence & Development (ICTeD-2024), Melaka, Malaysia, 2024.
- A. Ahamed, N. Ahmed, J. I. Janjua, Z. Hossain, E. Hasan, and T. Abbas, "Advances and Evaluation of Intelligent Techniques in Short-Term Load Forecasting,"

www.thedssr.com



ISSN Online: 3007-3154 ISSN Print: 3007-3146

DIALOGUE SOCIAL SCIENCE REVIEW

Vol. 2 No. 3 (October) (2024)

2024 International Conference on Computer and Applications (ICCA-2024), Cairo, Egypt, 2024.

- M. T. R. Tarafder, M. M. Rahman, N. Ahmed, T.-U. Rahman, Z. Hossain, and A. Ahamed, "Integrating Transformative AI for Next-Level Predictive Analytics in Healthcare," 2024 IEEE Conference on Engineering Informatics (ICEI-2024), Melbourne, Australia, 2024.
- A. Ahamed, M. T. R. Tarafder, S. M. T. H. Rimon, E. Hasan, and M. A. Amin, "Optimizing Load Forecasting in Smart Grids with AI-Driven Solutions," 2024 IEEE International Conference on Data & Software Engineering (ICoDSE-2024), Gorontalo, Indonesia, 2024.
- O'Flaherty, Kate. "All the Ways Netflix Tracks You and What You Watch." Wired UK, 10 Oct. 2021, www.wired.co.uk/article/netflix-data-tracking-privacy.
- Rastogi, Divya, et al. "A Parametric Analysis of AVA to Optimise Netflix Performance." International Journal of Information Technology, 2023, pp. 1– 8, www.ncbi.nlm.nih.gov/pmc/articles/PMC10186304/, https://doi.org/10.1007/s41870-023-01281-z.
- Steck, Harald, et al. "Deep Learning for Recommender Systems: A Netflix Case Study." AI Magazine, vol. 42, no. 3, 20 Nov. 2021, pp. 7–18, ojs.aaai.org/index.php/aimagazine/article/view/18140, https://doi.org/10.1609/aimag.v42i3.18140.
- van Es, Karin. "Netflix & Big Data: The Strategic Ambivalence of an Entertainment Company." Television & New Media, vol. 24, no. 6, 26 Sept. 2022, p. 152747642211257, journals.sagepub.com/doi/10.1177/15274764221125745, https://doi.org/10.1177/15274764221125745.
- Xie, Huizhi, and Juliette Aurisset. "Improving the Sensitivity of Online Controlled Experiments." *Proceedings of the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, 13 Aug. 2016, https://doi.org/10.1145/2939672.2939733.
- Zeynep ERDOĞAN. "Netflix's Machine Learning, Personalization, Culture Effect and Its Evolution in Covid-19." *Intermedia International E-Journal*, 3 May 2023, https://doi.org/10.56133/intermedia.1066604. Accessed 14 Aug. 2023.