

Rutgers University Data Science Club



Market Analysis Overview of Members and Future Expansion Plans

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Audience & Market Analysis

Situation Analysis

Data Science Preparation Industry Outlook

The interdisciplinary field of data science, which aims to derive meaningful insights from structured and unstructured data using scientific processes and algorithms, is experiencing a remarkable surge in interest. According to projections from the U.S. Bureau of Labor Statistics, job opportunities in the field are expected to witness a substantial 36 percent growth between 2021 and 2031 (Data Scientists, 2023). This surge, significantly surpassing the average growth rate for all occupations, is propelled by employers across businesses, government agencies, and non-profits, who increasingly recognize how data-informed strategies can increase successful outcomes (Chadwick, 2023).

Recognizing the demand, higher education institutions across the country have developed numerous new undergraduate and master's programs with the objective of graduating individuals equipped with the analytical skills needed for this field. For example, following the success of the undergraduate data science minor and certificate programs launched in 2021 at Rutgers University, in the spring of 2023, the Board of Governors approved the introduction of two new degree programs in data science—a Bachelor of Arts and a Bachelor of Science (Chadwick, 2023). There is a parallel need for supportive communities within academic settings. Research found that STEM learning communities are positively correlated with students' intention to stay focused on their major (Solanki, 2019). For the growing industry of supplemental data science preparation, they play a crucial role in providing data science students with avenues for collaboration, skill development, and a deeper understanding of the practical applications of data science.

About Our Organization

The Rutgers Data Science Club is a student-led organization at Rutgers University in New Brunswick, NJ, dedicated to fostering a vibrant community of students passionate about exploring and advancing their skills in the field of data science. Following the COVID-19 pandemic and a growing interest in data science at the undergraduate level at Rutgers, the club was re-founded in 2021 and, as of December 2023, boasts 591 members and 12 officers. We believe that data science is transformative, recognizing its widespread applications across diverse fields, and seek to empower our members to apply their knowledge to drive innovation and positive change in society.

Services We Offer

As an academic club associated with Rutgers University, the Rutgers Data Science Club hosts weekly one-hour meetings on Wednesday evenings in the Student Center on the Busch campus, available to any current undergraduate or graduate student at no additional cost. Although specific meeting topics vary by semester and are coordinated by the club's president and event planning committee, they are largely

categorized into the following topics. Many of these are workshops taught by club officers covering various libraries of technical tools required in data analytics and data science—such as R, Python, SQL, and Tableau—providing immediate educational value to attendees. Another category is presentations on internship and career preparation—such as reviews of resumes and LinkedIn profiles and mock technical and behavioral interviews. Less frequently, we invite company recruiters, professors, and Ph.D. students to speak on trends in a specific area of data science and to answer questions—as well as destresser events with a focus on networking and relaxation. We always offer complimentary pizza and snacks at every meeting. The most notable event is our semesterly “Datathon,” in which participants are given a dataset and a topic and have 5 days to develop and submit a presentation with their findings. Winners chosen by club officers and participating professor(s) are given a cash reward and a digital certificate signed by the professor(s) that can be linked to LinkedIn.

Competitors

When evaluating competitors for the Rutgers Data Science Club, it's crucial to encompass all communities accessible to Rutgers students interested in data science, ranging from campus organizations to external resources providing similar services. Our sole product form competitor on campus is the Rutgers Data Science Society. Much like our club, it offers skill-based workshops and seminars tailored for students interested in data science. Despite similar offerings, they currently have less visibility and engagement, with only 324 Instagram followers and less frequent updates on social media. Within the product category, our competition includes various technology organizations at Rutgers, which cater to a broader audience yet still offer valuable resources relevant to data science enthusiasts. This includes Rutgers USACS (Undergraduate Student Alliance of Computer Scientists), which offers programming language workshops called "USACS Labs" as well as expert seminars called "Hacker Hour." Some other product category competitors are Rutgers BITS (Business Information Technology Society)—which offers workshops in business analytics tools—and "Hack RU"—an organization that hosts semesterly 24-hour hack-a-thons. An external product category competitor is Kaggle, the largest online data science community with over 16 million users which has a plethora of discussions, courses, and competitions (Kaggle, n.d.).

Generic competitors include general interest organizations like RU SOARS, attracting students with broad STEM interests. The reach of such organizations may overlap with our data science initiatives, posing a potential challenge in capturing the attention of students interested in STEM fields. Budget competitors for the Rutgers Data Science Club include YouTube channels like Codebasic's academy and subreddits such as r/DataScience and r/MachineLearning. These platforms offer free resources and virtual communities for collaboration on data science projects, providing an alternative for students looking for cost-effective learning opportunities, but are largely unstructured and lack funding.

Marketing Objective

Student organizations' semesterly budgets are determined by the Rutgers University Student Assembly

(RUSA) Allocations Board, which grants over \$1,000,000 in funding (derived from student tuition) to over 400 organizations per semester. One of the most influential criteria in the allocation process for clubs is the number of attendees per event, in addition to the cost of the venue and equipment needed (Rutgers University, n.d.b). Attendance is measured at every meeting by adding up all the students who scanned a QR code unique to each meeting that redirects them to the platform getINVOLVED, which requires students to sign in with their school credentials. If an organization has consistently high turnouts at its events, it proposes a convincing argument to RUSA to augment allocations to allow for further growth. This increased budget may allow for larger venues, more diverse event programming, and additional materials and resources to improve the quality of meeting experiences for members.

With this in mind, the marketing objective for the Spring 2024 semester, January 16th to May 1st (Rutgers University, n.d.a), is to increase the Rutgers-allocated club budget by increasing the number of total attendees at every meeting from about 50 as it stands at the end of the Fall 2023 semester, to 80 students or more. As prospective data scientists and analysts, we have already created a spreadsheet that parses data from getINVOLVED to track the number of total attendees, new attendees, and returning attendees, among other information, such as the category and subcategory of each event. Using this to track attendance, if 80 or more students consistently come to weekly meetings and scan the QR codes over a period of 8 meetings (2 months), the Rutgers Data Science Club's treasurer will have sufficient evidence to present to the RUSA of a need for increased allocations.

In order to fulfill this goal, the marketing team first needs to increase engagement on its social media posts on platforms that its audience primarily uses to stay informed about what is happening on campus. More frequent posts showcasing the community aspect of this club, such as follow-up pictures of the turnouts of successful events, will help build a sense of belonging among current members and attract new ones. This is exactly how one of our product category competitors, Rutgers BITS, maximizes visibility on Instagram; its graphics announcing meetings only receive an average of 60 likes, but its post-event group pictures more than double that. Further, a study analyzing 1.1 million Instagram photos by The Georgia Institute of Technology and Yahoo Labs found that pictures with faces in them were 38% more likely to receive more likes compared to those without (Mederer, 2014). So, at least on Instagram, the platform where we have the largest following, we should highlight moments where our members are enjoying the meetings more frequently—and perhaps use faces in some of the pre-event marketing. This should help cultivate a larger online presence and translate into a larger following, as another objective of ours is to increase the club's Instagram following from 756 followers currently to 900 or more by the end of the Spring semester. Following the results of the audience analysis, the marketing team can also prioritize the use of other platforms its audience uses frequently.

The event planning team also needs to create interesting workshops that expand on the knowledge of the majority of members in whichever programming language is being taught. In the three weeks immediately following the Fall 2023 semester and before the Spring 2024 semester, using insights about the target audience from the market research survey, they will draft ideas for each workshop for the Spring 2024

semester and present them to the marketing team. All posts that advertise workshops will explicitly list which skills are being taught (usually in the lower third of the graphic) that do not align with skills already known by the target audience in order to clearly communicate educational value.

Lastly, pre-event social media marketing posts will be better optimized in order to reach more people and communicate value more clearly. They will be posted a day earlier than they were in the fall semester of 2023—on Sunday instead of Monday—to capture people planning their week's obligations ahead of time and give us an extra day of promotion. The new Instagram posting schedule will be an event announcement on Sunday at 10 AM, several stories leading up to the event on Wednesday at 7 PM, and a post-event community picture on Thursday at 1:35 PM. Posts announcing meetings could also be framed in a way that communicates a sense of urgency on top of communicating value by including that there will be limited places available, encouraging people to RSVP on getINVOLVED, and using Instagram countdown stories.

Target Audience

Demographically, the primary focus of the Rutgers Data Science Club's target audience is on male underclassmen, specifically freshmen and sophomores. This audience is characterized by an academic background in Computer Science or Data Science, either as a major or a minor. In terms of programming language proficiency, the club should focus its outreach on individuals who have little to no experience in both R and Python, with an intentional emphasis on welcoming beginners to the field. Additionally, when it comes to SQL, those individuals will have little to moderate experience.

In the realm of psychographic segmentation, the target audience of the Rutgers Data Science Club resonates with the Achiever profile according to VALS (Values, Attitudes, and Lifestyles, Segmentation). With a commitment to personal and professional advancement, this audience is goal-oriented and hardworking, showcasing a commitment to results-driven educational value. In relation to the club, they are motivated by learning experiences that align with their career objectives and contribute to their success. Additionally, this audience values technology that enhances productivity, reflecting a pragmatic and efficient approach to their data science endeavors (Strategic Business Insights, n.d.).

Target Audience Analysis

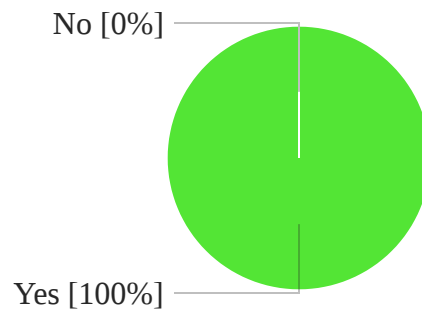
Methodology

A 16-question questionnaire was created via Qualtrics in order to obtain data to fulfill the marketing objective. The first five of the eight demographic questions assess participants' academic standing at Rutgers, including their year of study, gender, major, minor/certificate, and the primary social media platform they use for Rutgers-related news. The insights derived from this aim to provide a basic understanding of the target audience, as well as which platforms should be utilized to spread marketing material. The next three

demographic questions assess participants' familiarity with the most common data science programming languages (R, Python, and SQL) in order to establish how much experience the event planning team should assume from the target audience before creating workshops. These are strategically placed immediately after demographic questions and before club-specific questions in order to reduce question-order bias as much as possible. If respondents are unaware that the survey relates to the club, they may answer more honestly.

The next eight questions comprise one general psychographic question, three club-specific psychographic questions, and four demographic questions that act as qualifier questions. The first, "What aspect of data science interests you the most?" seeks to find out what motivates the target audience to continue their education around data science; by knowing this information, we can further segment our target market by assuming career goals and problem-solving orientations. To assess respondents' satisfaction and interest in Rutgers Data Science Club questions, there needed to be qualifier questions. In retrospect, the tenth question which asked if respondents were familiar with the club, could be omitted since the survey was distributed via QR codes that had to be scanned in person at the end of four club meetings. This oversight is visible in Figure B-10 below:

Figure B-10: Pie Chart of Distribution of Respondents' Knowledge of Rutgers Data Science Club
116 Responses



For respondents who self-reported attending one or more meetings, they were prompted to answer psychographic questions asking which meeting category (as alluded to in the situation analysis) was their favorite, excluding the Datathon, and their overall experience at a typical meeting. This aimed to gauge what type of value proposition intrigues members the most (educational value for workshops, and networking value for destressers, for example) as well as get opinions on the delivery of the advertised value proposition, on average. Lastly, if the respondents both heard about and participated in a Rutgers Data Science Club Datathon (two qualifier questions), they were prompted to another opinion question gauging the delivery of value proposition marketed to them in Datathons specifically.

Figure B-16: Pie Chart of Distribution of Respondents' (Who Participated in a Rutgers Data Science Club Datathon) Rating of The Last Datathon They Participated In

45 Responses

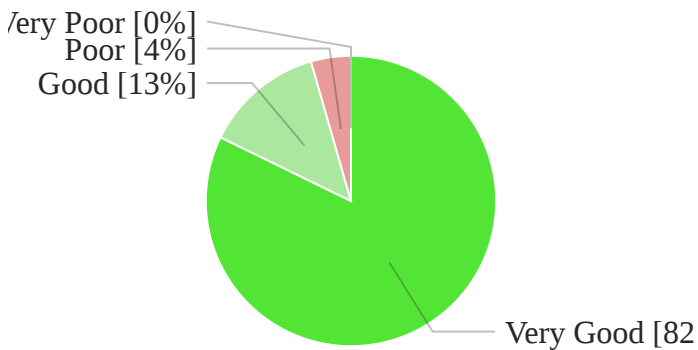
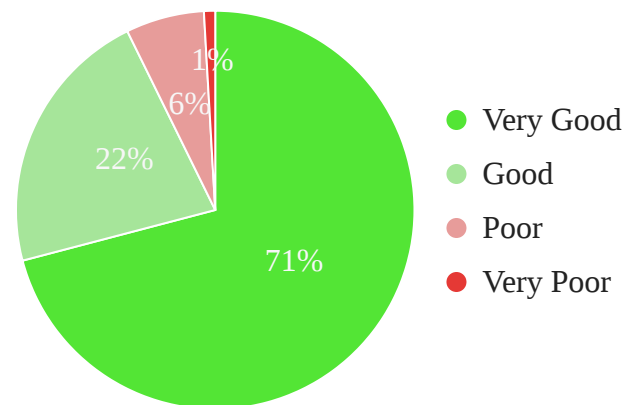


Figure B-12: Pie Chart of Distribution of Respondents' (Who Attended 1+ Meeting) Ratings of Typical Rutgers Data Science Club Meetings

110 Responses



Since Datathons involve more planning, it is surprising to see that the 96% positive satisfaction rating for Datathons in Figure B-16 seems to be similar to the 93% for typical meetings for all other meetings (Figure B-12). However, it should be noted that a higher percentage (11%) of respondents rated Datathons as "Very Good," suggesting that the marketing and/or content delivery used for Datathons can still be used for regular meetings to increase overall satisfaction and, therefore, perhaps more returning members.

As already briefly explained, the method of survey distribution was convenience sampling. Being a club officer, I had access to meeting presentations beforehand and included a QR code for the survey on the last slide (next to the attendance QR code). I asked attendees to "...scan this QR code to fill out an anonymous data science survey for a class I'm taking if you haven't already" before they left. This occurred over the course of four meetings, each in different meeting categories (a Halloween destresser social, a Data Science Major classes review, a Ph.D. speaker event on data clustering, and a Python TensorFlow library workshop) to have a more representative sample. In other words, I wanted to capture members who came to more popular events (like programming workshops) as well as more loyal members (who came to every meeting). Of the 149 individual students (as confirmed through our spreadsheet tracker) who attended at least one of those meetings, 116 responded to the survey, equating to a 77.85% response rate; this high response rate was likely due to the survey being done in person and with the motivation to help another student out. The target audience was derived from the survey as well as insights supporting the marketing objective, shown below.

Data Supporting The Target Audience

Figure B-1: Pie Chart of Distribution of Respondent's Year at Rutgers

116 Responses

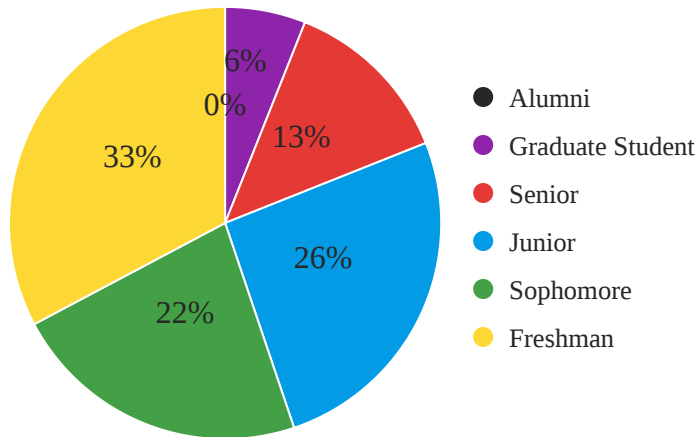
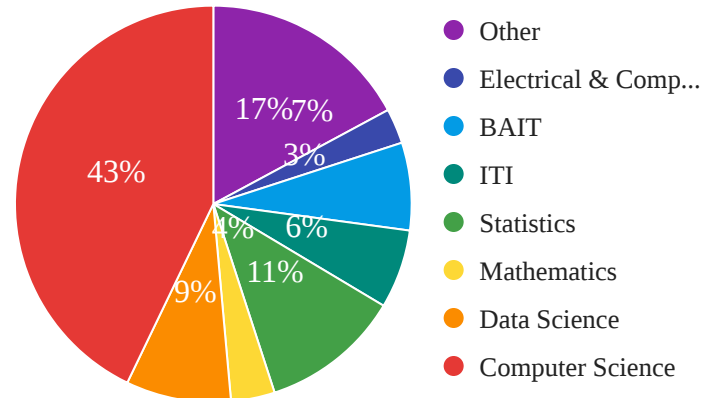


Figure B-3: Pie Chart of Distribution of Major/Field of Study



While the largest class year group was found to be freshmen, with a third of the responses, our true target audience is undergraduate underclassmen, with the majority (55%) of the responses. This group is likely just starting their major(s) and minor(s), so they will not have taken upper-level elective classes. Further, since the majority (51%) of responses are Computer Science and Data Science majors, we're confident that this is our target audience. Knowing that the event planning team is comprised of upperclassmen representative of these majors, I will inform them to share more information and/or experiences from their upper-level classes in event presentations since it will not, based on the data, be too repetitive, if at all.

Figure B-4: Pie Chart of Distribution of Respondents' Minor/Certificate

62 Responses

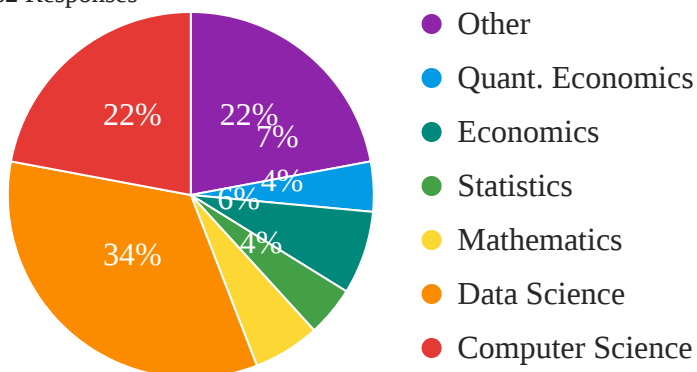
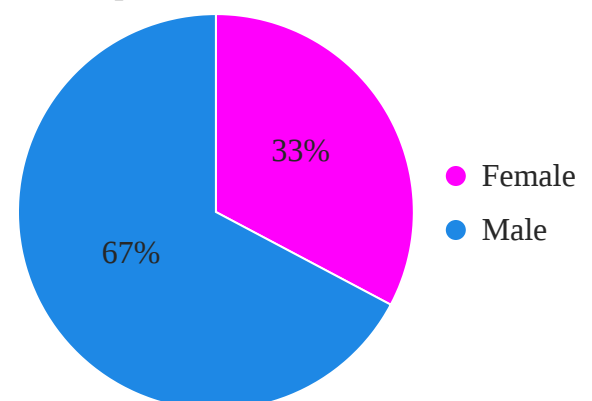


Figure B-2: Pie Chart of Distribution of Respondent's Gender



Similarly, since the majority (56%) of those with minors are in Computer Science or Data Science, they are our target audience. Just like how Data Science is already the most popular minor among respondents, I expect the percentage of majors to increase in the coming semesters because, as I outlined in the Situation Analysis, it just became available last semester. Regarding gender demographics, two-thirds (67%) of respondees being male versus only a third (33%) being female is quite on par with the gender distribution of the target audience's majors at Rutgers and does not surprise me. Although we want to make the club as inclusive as possible, since we are launching a new subgroup called "Women in Data Science" as part of this club for the Spring 2024 semester, we can use this information to budget for those less frequent meetings comprising only women and non-binary people. To start, we can expect only a third of the turnout from our regular events at those meetings, so that will be the ceiling for expenses.

Figure B-6: Bar Chart of Distribution of Respondent's Level of Experience in R

116 Responses

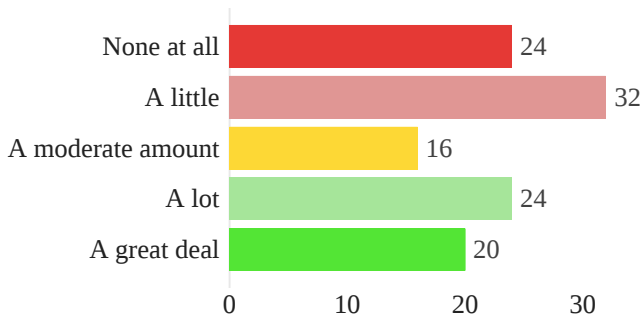
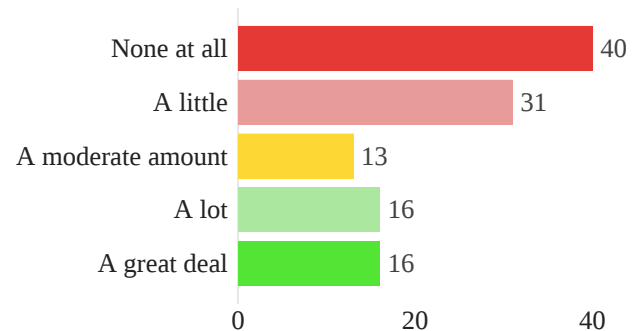


Figure B-7: Bar Chart of Distribution of Respondent's Level of Experience in Python

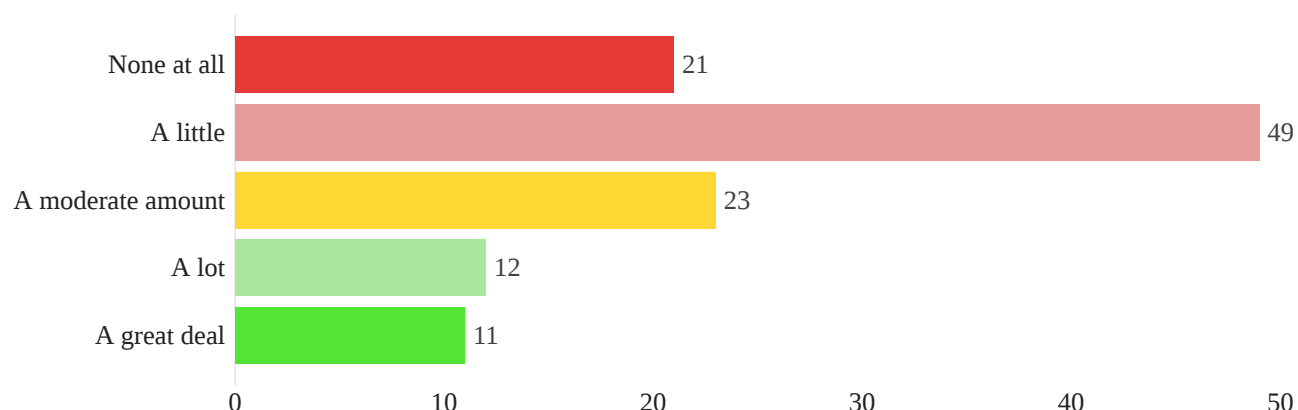
116 Responses



Those with little or no experience make up the two largest groups for the questions that assess experience in R and Python, suggesting that our target audience may have just started or haven't started learning these languages in their classes—corresponding to underclassmen representing the majority of responses, since Rutgers is the time most people are first exposed to them. Knowing this, we will continue to develop beginner-friendly presentations and workshops in order to familiarize our target audience with the ins and outs of the languages before delving into more complex topics. On average, however, it seems that more people are at least "A little" familiar with R over Python. This is probably due to Rutgers offering a plethora of classes in different departments using R, a considerable contrast to the few Python-taught courses, of which many require the requisite of Java. Acknowledging demand from our target audience, and from the market—Python is the most requested language in data science job interviews (45 Data Science Interview Questions, n.d.)—we can create straightforward marketing material as outlined in the Marketing Objective that emphasizes things like "Learn Python" to grab the attention of our target audience.

Figure B-8: Bar Chart of Distribution of Respondent's Level of Experience in SQL

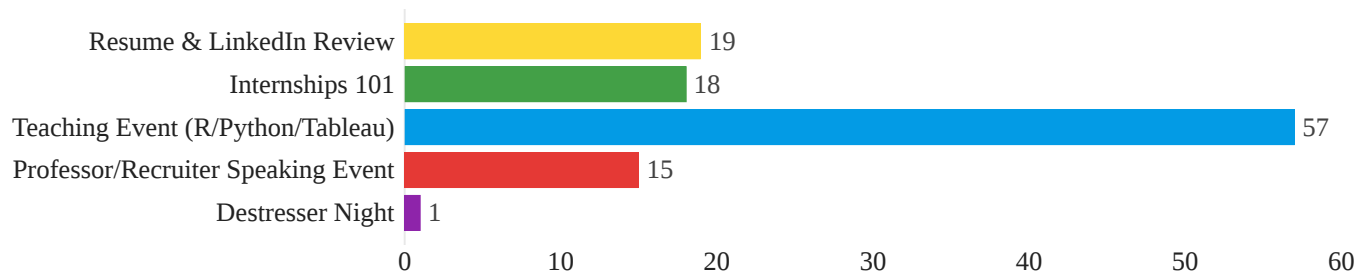
116 Responses



Out of the three programming languages asked about, SQL seems to have the most familiarity, with "A little" and "A Moderate amount" making up the majority of responses. This gives us the green light to plan more advanced meeting topics in SQL, but still make sure to cover the basics briefly at the start of the meeting. In hindsight, this number may have been a bit inflated compared to others particularly due to the fact that we just hosted an SQL workshop the week prior to when I started promoting the survey on meeting slides—whereas we hadn't done one on R or Python yet this semester at the time.

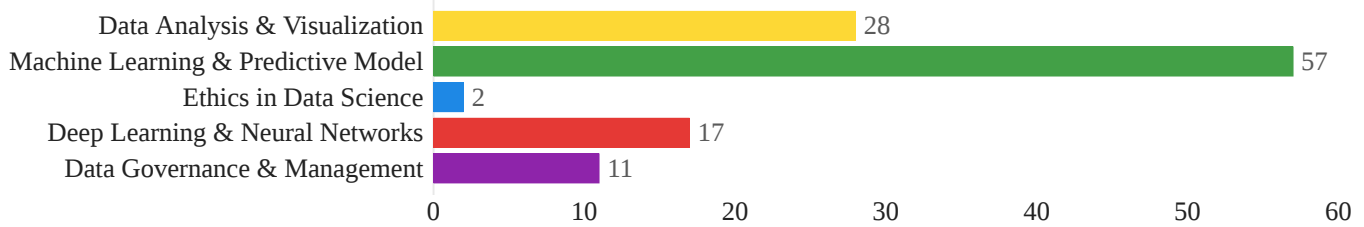
Figure B-13: Bar Chart of Distribution of Respondents' (Who Attended 1+ Meeting) Favorite Rutgers Data Science Club Meeting

110 Responses



The strategic selection of our target audience based on their favorite meeting topics complements their Achiever profile, as identified in the VALS psychographic segmentation. Our target audience prefers meetings where hands-on educational value is provided since the most popular topic is Teaching Events by a landslide (57/110). In other words, they are motivated to attend if they are promised to learn new skills that will help them in their professional development. This inclination towards experiential learning aligns with their overarching goal-oriented nature, indicating a preference for tangible outcomes.

Figure B-9: Pie Chart of Respondent's Data Science Area of Data Science Found Most Interesting
115 Responses

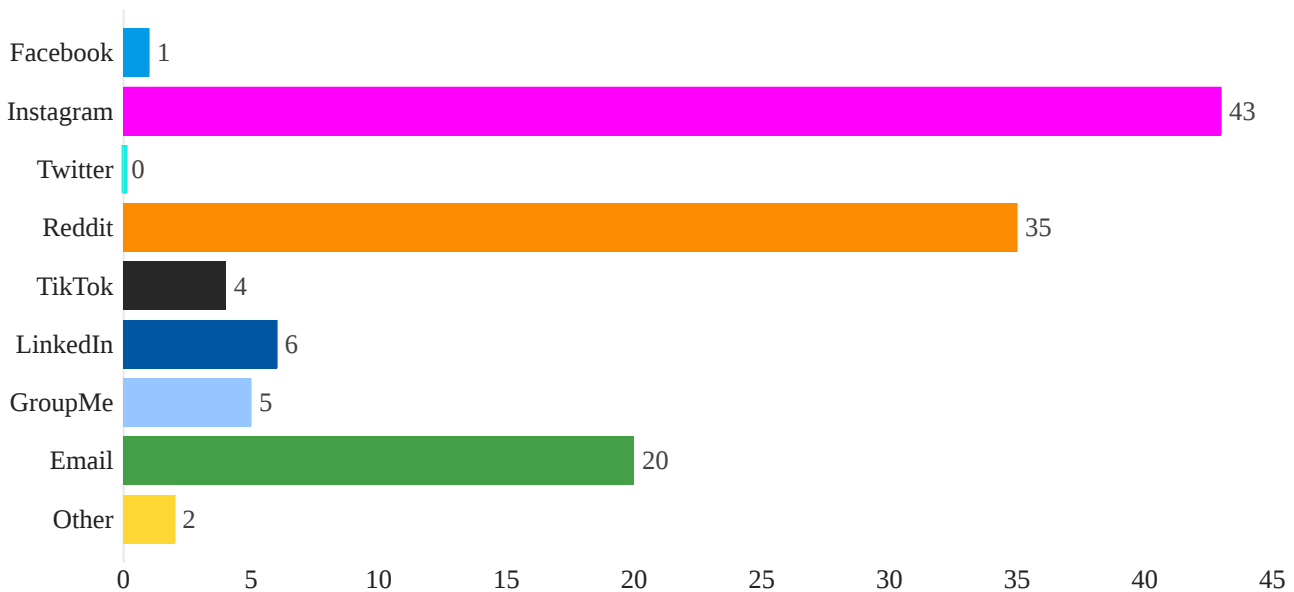


Similarly, the strong preference (57/115) for "Machine Learning & Predictive Modeling" as the most interesting field in data science among our target audience underscores their keen interest in innovative methodologies and technologies, as outlined previously. This reflects a community that actively seeks to engage with and contribute to the forefront of data science advancements (rather than basic data manipulation, for example). We can combine these insights about what interests our target audience with insights about what motivates them—hands-on workshops—to create intro-level Python and R workshops focusing on various topics in machine learning and predictive modeling.

Data Supporting The Marketing Objective

The analysis of the results of question five provides significant support for the proposed marketing objective, as shown in Figure B-5 below:

Figure B-5: Bar Chart of Distribution of Respondent's Primary Source of Rutgers News



Out of the 116 total responses, 43 members identified Instagram as their main platform for staying informed about campus activities and events. This data reinforces the marketing objective to focus on Instagram to increase club visibility and engagement. Leveraging this platform aligns with the preferences of our target audience, making it a strategic choice for achieving our goal of increasing attendance at club meetings. Interestingly, the survey also indicated that Reddit holds significance as a source of information for our members, with 35 respondents identifying it as the second most used platform for Rutgers-related news. Despite our current absence on Reddit, this presents a valuable opportunity for the marketing team to explore and potentially expand our outreach. Strategies could include creating a dedicated subreddit for the Rutgers Data Science Club, engaging with relevant communities, and sharing event highlights or announcements. By tapping into this platform, we can enhance our reach and connect with members who prefer Reddit as a primary (or secondary) source of information. Email being identified as the third most used platform for staying informed (20/116) gives our outreach team confidence to continue to put out weekly newsletters, which play a role in maintaining engagement. As a platform with a more direct touch, email can complement our social media efforts by providing detailed information and serving as a reliable channel for communication with our members. By aligning our marketing efforts with the preferred communication channels of our target audience, we aim to maximize engagement, increase attendance, and ultimately achieve our objective of securing a higher club budget allocation from RUSA.

Figure B-12: Pie Chart of Distribution of Respondents' (Who Attended 1+ Meeting) Ratings of Typical Rutgers Data Science Club Meetings

110 Responses

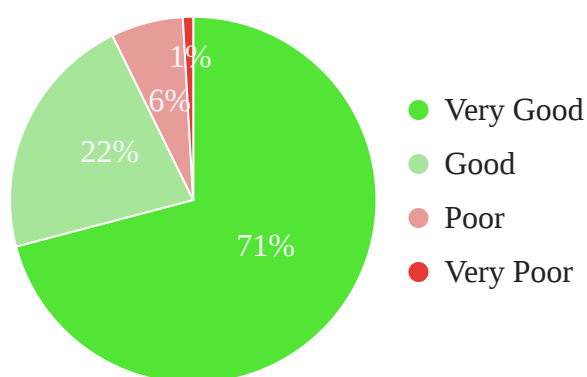
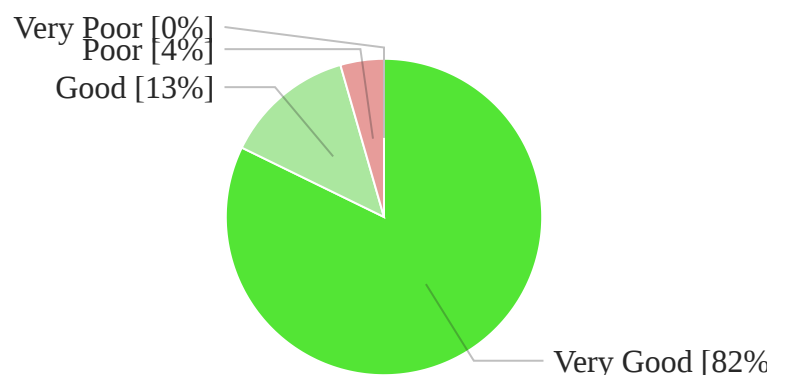


Figure B-16: Pie Chart of Distribution of Respondents' (Who Participated in a Rutgers Data Science Club Datathon) Rating of The Last Datathon They Participated In

45 Responses



By creating and marketing more data science programming workshops in various libraries of R, Python, and SQL (such as numPy and pandas), as described before, we can increase the number of regular attendees across the 8 weeks needed to request additional funding, because we will be hosting events

that satisfy the needs of the target audience by providing significant educational value that motivates attendees to come. At the end of the Spring 2024 semester, we will send out a questionnaire similar to this one that assesses satisfaction with meetings. We see significant room for improvement, given that only 71% of respondents rated typical meetings as "Very Good." Through the operational and marketing methods outlined previously that are tailored to our target audience, we aim to increase the percentage of satisfied attendees to around 90% or more for both weekly meetings and our semesterly Datathon.

Conclusions and Recommendations

The market research conducted for the Rutgers Data Science Club provided valuable insights into the preferences and needs of the target audience – primarily consisting of male undergraduate underclassmen majoring in Computer Science or Data Science. Going into this project, that was the only thing we knew about our target audience; but we learned much more as a result. With a focus on machine learning workshops, the club will cater to individuals who are in the early stages of their programming language proficiency, particularly in Python. The analysis indicated a strong interest in innovative methodologies and technologies, emphasizing the importance of hands-on educational value in weekly meetings.

To optimize engagement, the club should strategically leverage Instagram, the primary platform for information among the target audience, showcasing community-building post-event pictures. Additionally, exploring Reddit as a supplementary platform and utilizing email communication for detailed information aligns with communication preferences. Tailoring workshops to beginners aligns with the target audience's skill levels and preferences, ensuring workshops are accessible and valuable.

The goal for the Spring 2024 semester is to increase the Rutgers-allocated club budget by elevating the number of total attendees at each meeting. The marketing team aims to achieve this by enhancing social media strategies, offering tailored workshops, and maximizing engagement through platforms preferred by the target audience. The primary objective is to align club activities with the target audience's identified demographic and psychographic traits, ultimately strengthening the club's position as the best resource for aspiring data scientists at Rutgers University. We will be tracking our progress through the semester via attendance numbers on getINVOLVED, Instagram/Reddit follower counts, and use the same convenience sampling method to attain satisfaction ratings post-semester.

Appendix A: Survey Questionnaire

Section 1: Demographics

1) What year are you at Rutgers?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate Student
- Alumni
- Not Applicable

2) What is your gender?

- Male
- Female
- Non-binary
- Other

3) What is your major/field of study? (Check all that apply)

- Computer Science
- Data Science
- Mathematics
- Statistics
- ITI
- BAIT
- Electrical & Computer Engineering
- Other _____

4) What is your minor/certificate? (Check all that apply)

- Computer Science
- Data Science
- Mathematics
- Statistics
- Economics
- Quantitative Economics
- Other _____
- Not Applicable

5) Where do you primarily get your Rutgers-related news from?

- Facebook
- Instagram
- Twitter
- Reddit
- Tik Tok
- LinkedIn
- GroupMe
- Email
- Other _____

6) How much experience do you have in R?

- None at all
- A little
- A moderate amount
- A lot
- A great deal

7) How much experience do you have in Python?

- None at all
- A little
- A moderate amount
- A lot
- A great deal

8) How much experience do you have in SQL?

- None at all
- A little
- A moderate amount
- A lot
- A great deal

Section 2: Psychographics & Company-Specifics**9) What aspect of data science interests you the most?**

- Data Analysis & Visualization
- Data Governance & Management
- Machine Learning & Predictive Modeling
- Deep Learning & Neural Networks
- Ethics in Data Science

10) Have you heard about the Rutgers Data Science Club?

- No
- Yes

11) How many Rutgers Data Science Club meetings have you attended (approximately)? *

- 0
- 1-3
- 4-6
- 7-10
- 11+

12) How would you rate your experience at a typical meeting? *

- Very Poor
- Poor
- Good
- Very Good

13) What is your favorite Rutgers Data Science Club meeting you have attended? **

- Resume & LinkedIn Review
- Internships 101
- Teaching Event (R/Python/SQL/Tableau)
- Professor/Recruiter Speaking Event
- Destresser Night
- None of the above

14) Have you heard about the Rutgers Data Science Club's Datathon?

- No
- Yes

15) Have you participated in a Rutgers Data Science Club Datathon? ***

- No
- Yes

16) How would you rate your overall experience at the last Datathon you participated in? ****

- Very Poor
- Poor
- Good
- Very Good

* Questions 11 and 12 were only shown if the response for question 10 was "Yes."

** Question 12 was only shown if the response for question 11 was not "0."

*** Question 15 was only shown if the response for question 14 was "Yes."

**** Question 16 was only shown if the response for question 15 was "Yes."

Appendix B: Survey Results

Table B-1: Distribution of Respondent's Year at Rutgers

116 Responses

Year	Choice Count
Freshman	38
Sophomore	26
Junior	30
Senior	15
Graduate Student	7
Alumni	0

Figure B-1: Pie Chart of Distribution of Respondent's Year at Rutgers

116 Responses

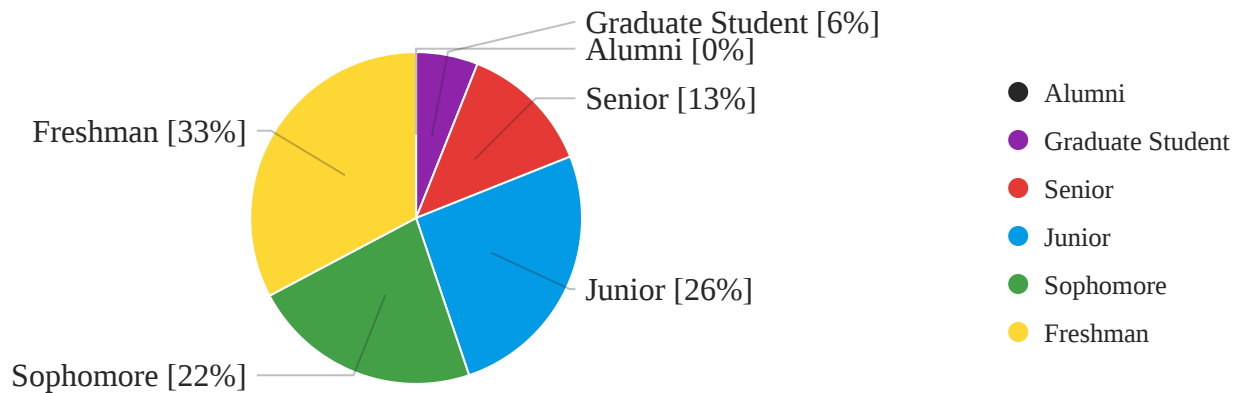


Table B-2: Distribution of Respondent's Gender

116 Responses

Gender	Choice Count
Male	78
Female	38

Non-binary	0
Other	0

Figure B-2: Pie Chart of Distribution of Respondent's Gender

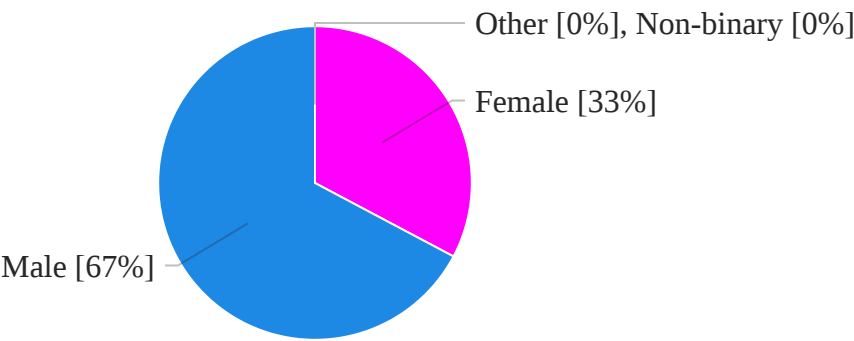


Table B-3a: Distribution of Respondent's Major/Field of Study

116 Responses

Field	Choice Count
Computer Science	60
Data Science	12
Mathematics	5
Statistics	16
ITI	9
BAIT	10
Electrical & Computing Engineering	4
Other	24

Table B-3b: Distribution of Respondents' "Other" Major/Field of Study*

24 Responses

Field

Accounting

Accounting, Supply Chain Management

Astrophysics

Biomedical Engineering

Biotechnology

Civil Engineering

Cognitive Science

Economics

Economics

Economics

Economics

Economics

Economics

Economics

Economics

Finance

Finance

Finance

Finance

Finance

Finance

Mechanical Engineering

Psychology

Public Health

* "Other" Responses With Multiple Counts:

(2) Accounting, (8) Economics, (6) Finance

Figure B-3: Pie Chart of Distribution of Major/Field of Study

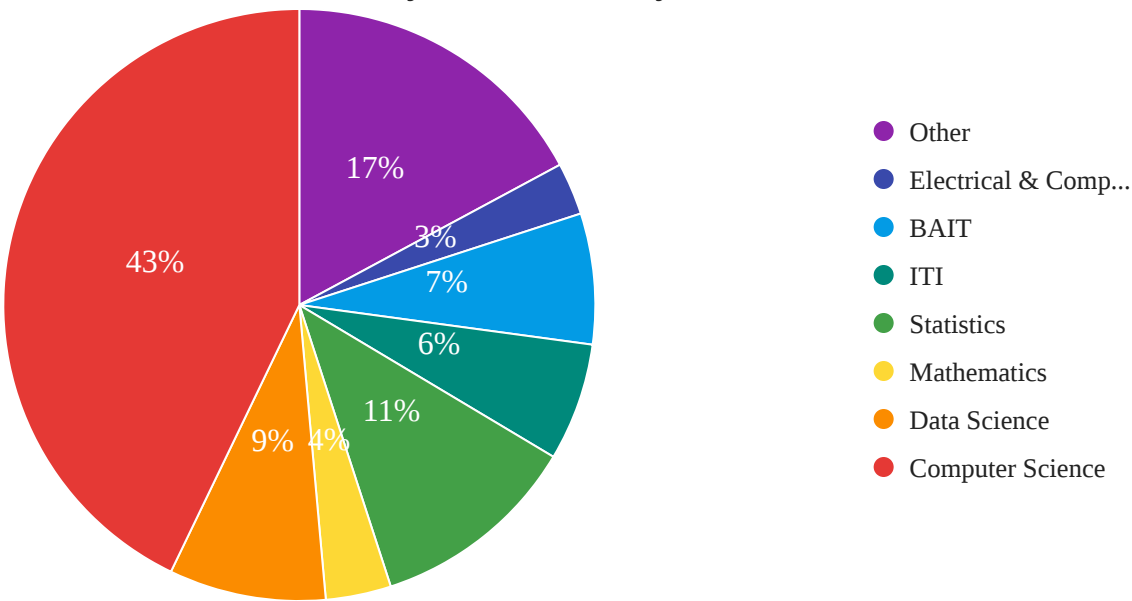


Table B-4a: Distribution of Respondents' Minor/Certificate

62 Responses

Field	Choice Count
Computer Science	15
Data Science	23
Mathematics	4
Statistics	3
Economics	5
Quantitative Economics	3
Other	15

Table B-4b: Distribution of Respondents' "Other" Minor/Certificate*

15 Responses

Field
Biology
Biology
Biology

Business Administration

Business Analytics

Cognitive Science

Cognitive Science

Criminology

Geology

Korean

Marketing

Marketing

Music

Psychology

Undecided

* "Other" Responses With Multiple Counts:

(2) Biology, (2) Cognitive, (2) Marketing

Figure B-4: Pie Chart of Distribution of Respondents' Minor/Certificate

62 Responses

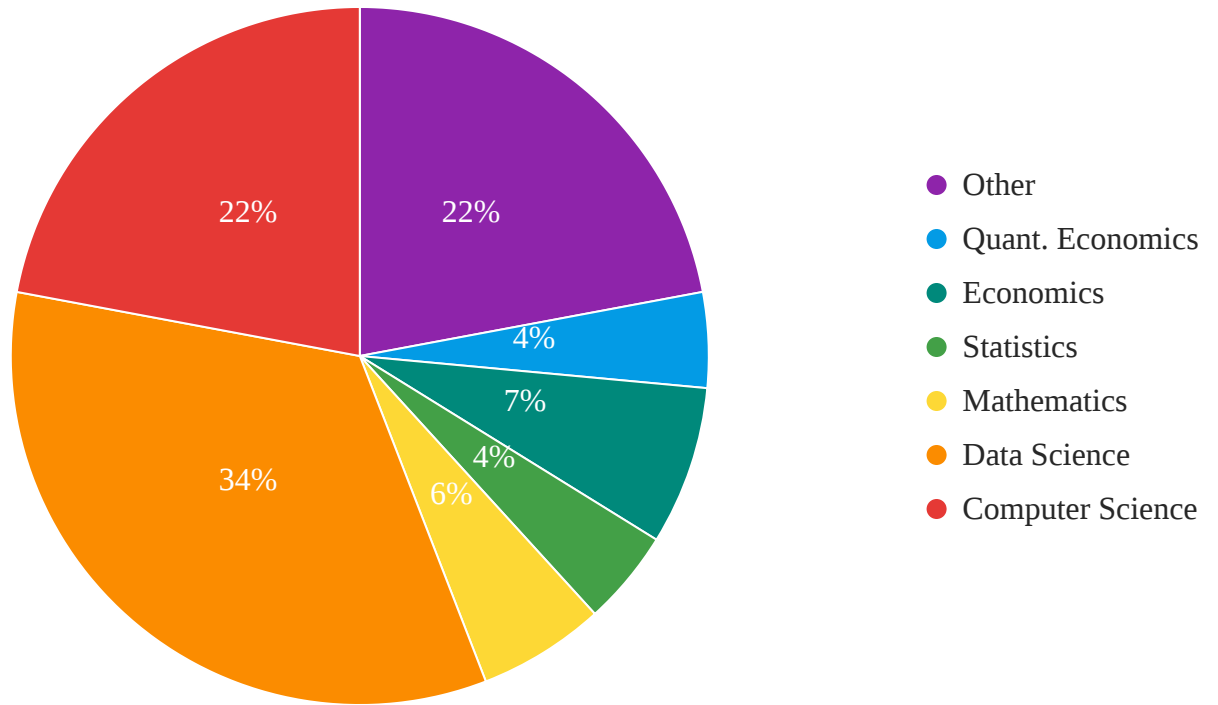


Table B-5: Distribution of Respondent's Primary Source of Rutgers News

116 Responses

Platform	Choice Count
Facebook	1
Instagram	43
Twitter	0
Reddit	35
TikTok	4
LinkedIn	6
GroupMe	5
Email	20
Other	2

* The (2) "Other" responses are both "Discord."

Figure B-5: Bar Chart of Distribution of Respondent's Primary Source of Rutgers News

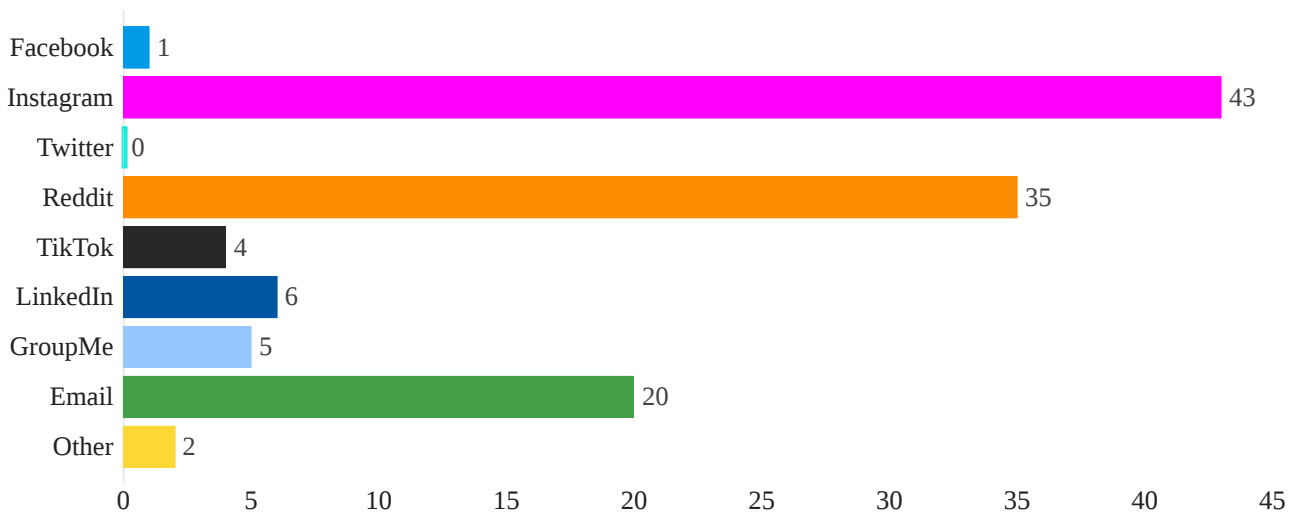


Table B-6: Distribution of Respondent's Level of Experience in R

116 Responses

Level of Experience	Choice Count
None at all	24
A little	32
A moderate amount	16
A lot	24
A great deal	20

Figure B-6: Bar Chart of Distribution of Respondent's Level of Experience in R

116 Responses

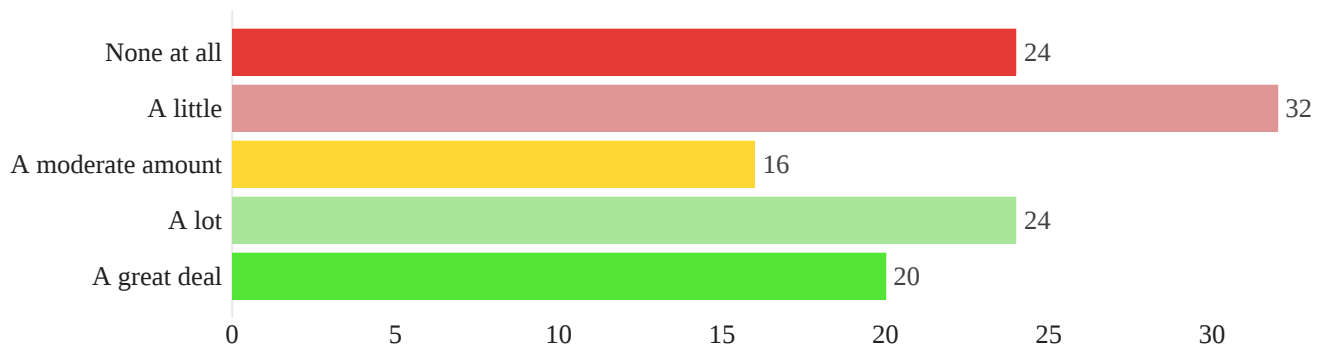


Table B-7: Distribution of Respondent's Level of Experience in Python

116 Responses

Level of Experience	Choice Count
None at all	40
A little	31
A moderate amount	13
A lot	16
A great deal	16

Figure B-7: Bar Chart of Distribution of Respondent's Level of Experience in Python

116 Responses

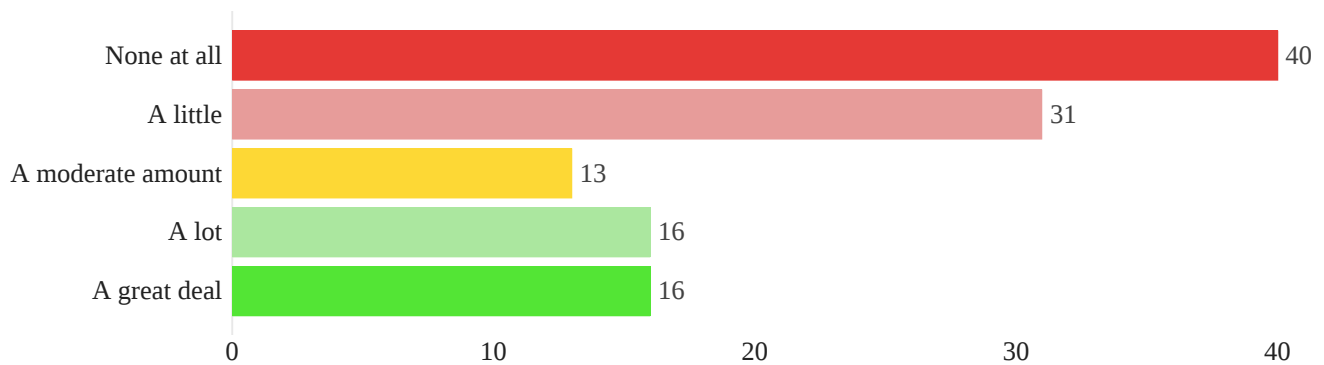


Table B-8: Distribution of Respondent's Level of Experience in SQL

116 Responses

Level of Experience	Choice Count
None at all	21
A little	49
A moderate amount	23
A lot	12
A great deal	11

Figure B-8: Bar Chart of Distribution of Respondent's Level of Experience in SQL

116 Responses

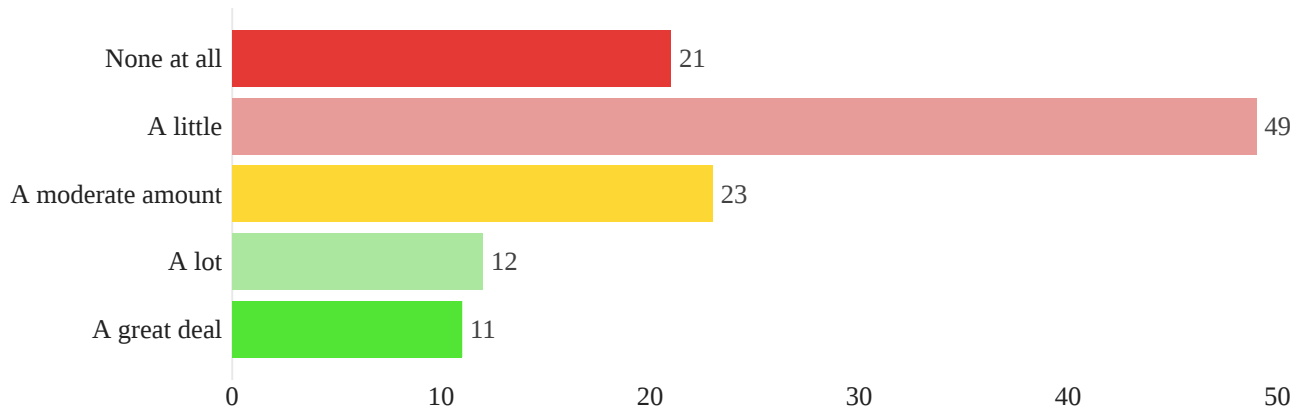


Table B-9: Distribution of Respondent's Area of Data Science Found Most Interesting

115 Responses

Field	Choice Count
Data Analysis & Visualization	28
Data Governance & Management	11
Machine Learning & Predictive Modeling	57
Deep Learning & Neural Networks	17
Ethics in Data Science	2

Figure B-9: Pie Chart of Respondent's Data Science Area of Data Science Found Most Interesting

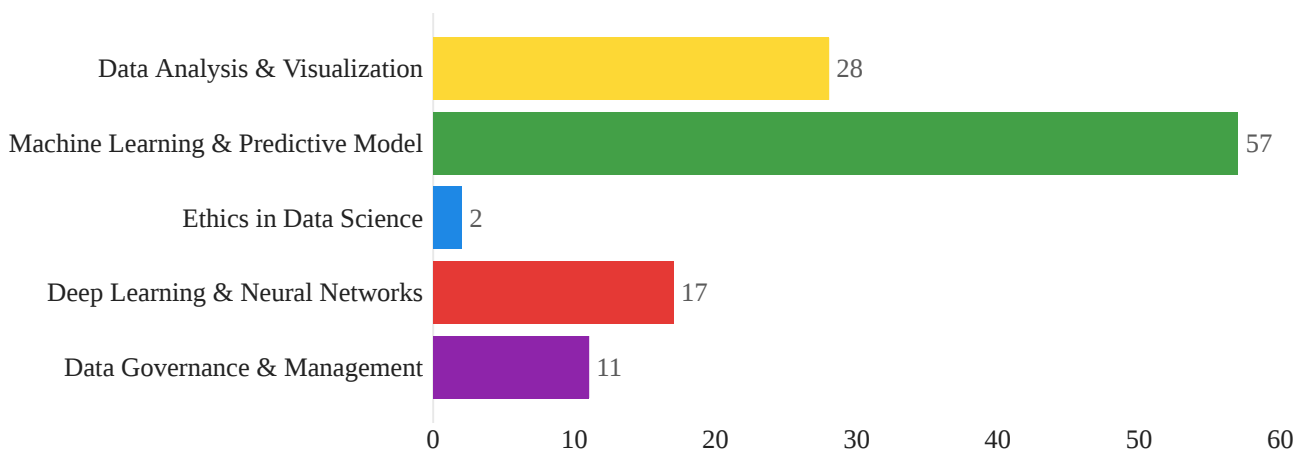


Table B-10: Distribution of Respondents' Knowledge of Rutgers Data Science Club

116 Responses

Response	Choice Count
No	0
Yes	116

Figure B-10: Pie Chart of Distribution of Respondents' Knowledge of Rutgers Data Science Club

116 Responses

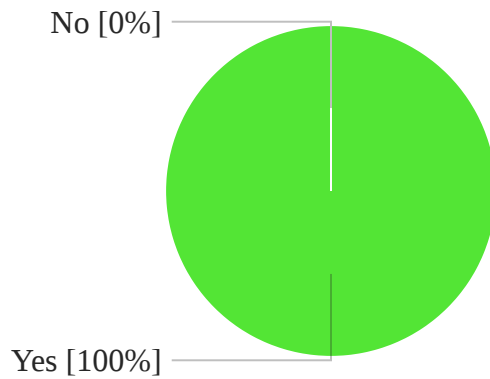


Table B-11: Distribution of Respondents' Approximate Number of Rutgers Data Science Club Meetings Attended

116 Responses

Number of Meetings	Choice Count
0	6
1-3	45
4-6	24
7-10	23
11+	18

Figure B-11: Pie Chart of Distribution of Respondents' Approximate Number of Rutgers Data Science Club Meetings Attended

116 Responses

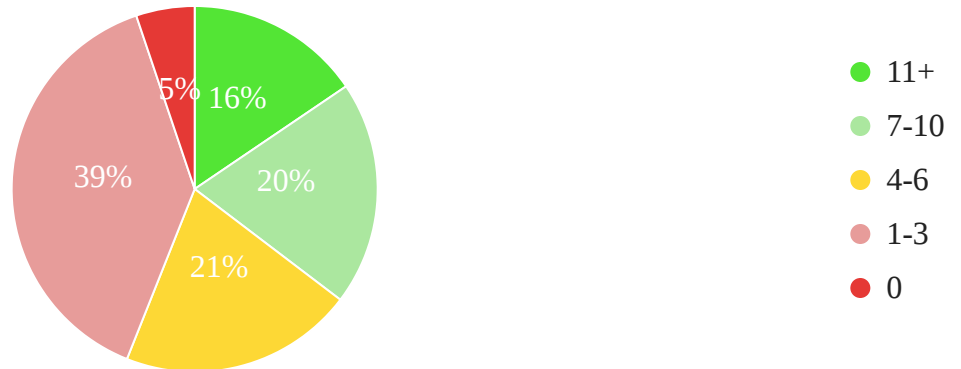


Table B-12: Distribution of Respondents' (Who Attended 1+ Meeting) Ratings of Typical Rutgers Data Science Club Meetings

110 Responses

Rating	Choice Count
Very Poor	1
Poor	7
Good	24
Very Good	78

Figure B-12: Pie Chart of Distribution of Respondents' (Who Attended 1+ Meeting) Ratings of Typical Rutgers Data Science Club Meetings

110 Responses

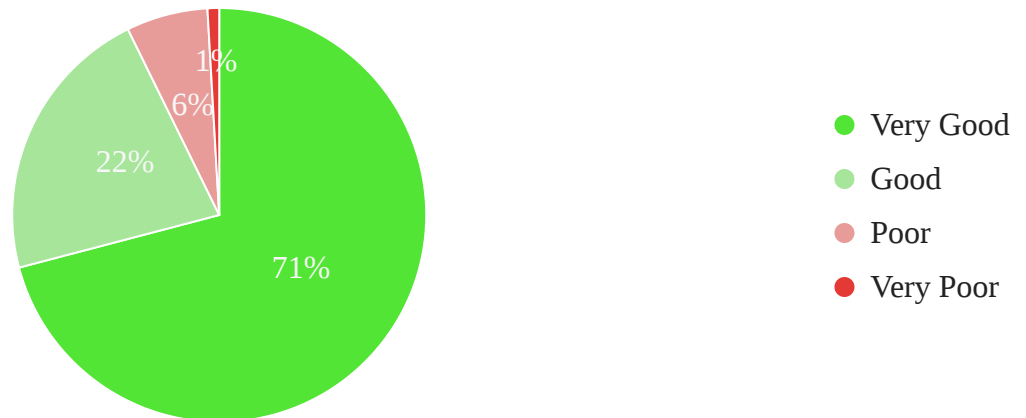


Table B-13: Distribution of Respondents' (Who Attended 1+ Meeting) Favorite Rutgers Data Science Club Meeting

110 Responses

Event	Choice Count
Resume & LinkedIn Review	19
Internships 101	18
Teaching Event (R/Python/Tableau)	57
Professor/Recruiter Speaking Event	15
Destresser Night	1

Figure B-13: Bar Chart of Distribution of Respondents' (Who Attended 1+ Meeting) Favorite Rutgers Data Science Club Meeting

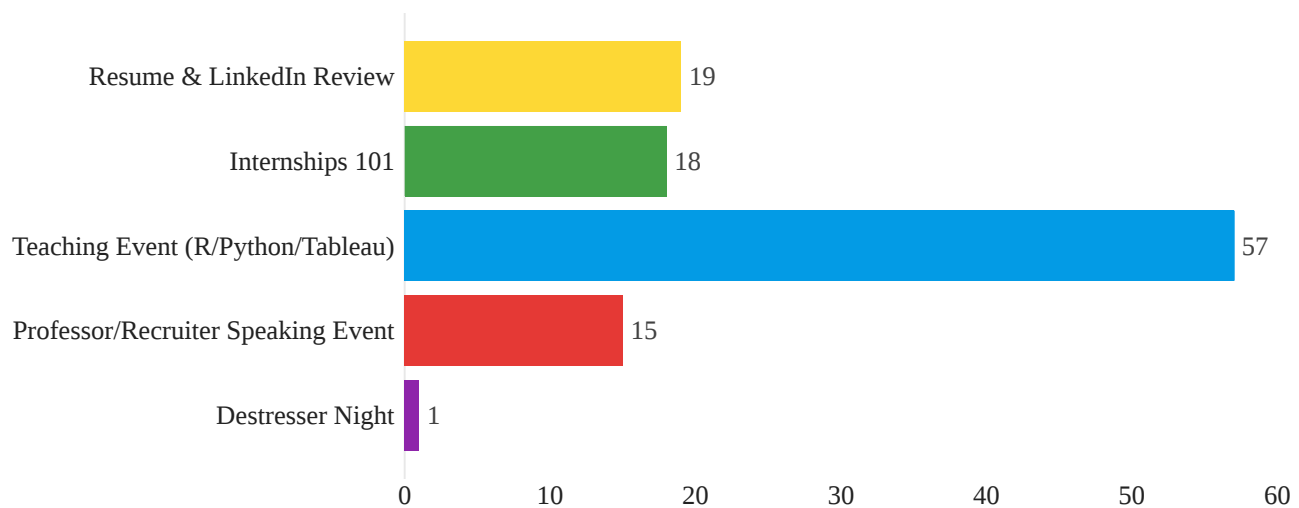


Table B-14: Distribution of Respondents' Knowledge of Rutgers Data Science Club's Datathon

116 Responses

Response	Choice Count
No	9
Yes	107

Figure B-14: Pie Chart of Distribution of Respondents' Knowledge of Rutgers Data Science Club's Datathon

116 Responses



Table B-15: Distribution of Respondents' Participation in a Rutgers Data Science Club Datathon

107 Responses

Response	Choice Count
No	62
Yes	45

Figure B-15: Pie Chart of Distribution of Respondents' Participation in a Rutgers Data Science Club Datathon



Table B-16: Distribution of Respondents' (Who Participated in a Rutgers Data Science Club Datathon) Rating of The Last Datathon They Participated In

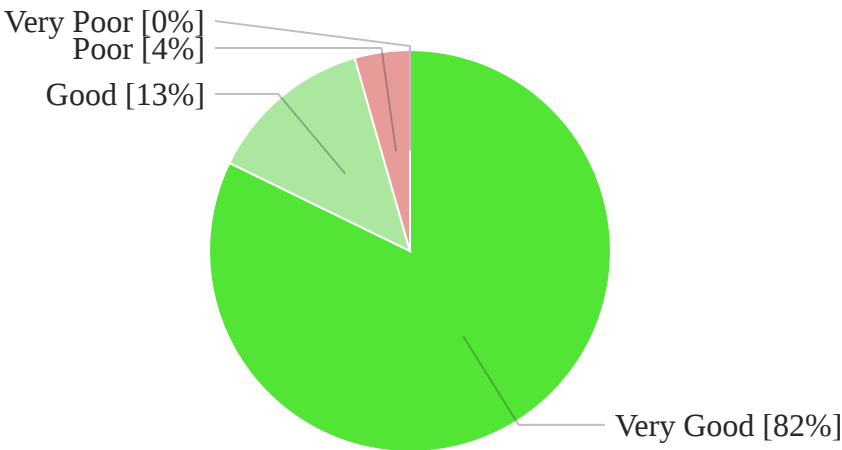
45 Responses

Rating	Choice Count
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Very Poor	0
Poor	2
Good	6
Very Good	37

Figure B-16: Pie Chart of Distribution of Respondents' (Who Participated in a Rutgers Data Science Club Datathon) Rating of The Last Datathon They Participated In

45 Responses



Appendix C: References

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