

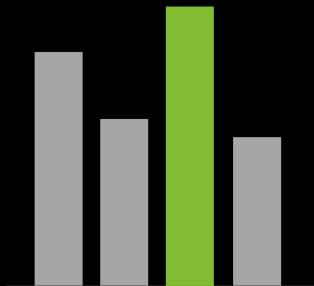
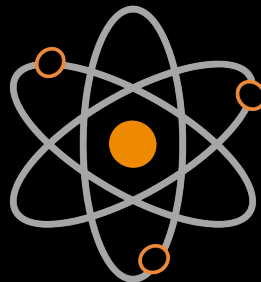
November 24, 2023



COMPETITION GUIDELINES

DATA CHALLENGE

This November, UNB's International Business & Entrepreneurship Centre (IBEC) will host the 8th annual data competition. The Data Challenge brings together 2 competitive events: Data Visualization and Data Analytics. Within these competitions, participants demonstrate the power of data storytelling, connect with leaders in academia, government and industry, and compete for \$6,000 in prize money. **All events are virtual.**

8th AnnualDATA **VISUALIZATION**
COMPETITION4th AnnualDATA **ANALYTICS**
COMPETITION

OVERVIEW

Participants will showcase their ability to tell a story driven by data in two unique competitive formats. Teams can take part in one or all events. It is an ideal setting for students and non-students to get engaged, network with leaders in academia, government and the private sector, and to explore the world of data science.



Pictured: Team *Three Sisters* wins 3rd place in the Teaser Poster category and takes home \$250.

All tracks will challenge competitors to demonstrate the power of data through analysis and visualization, but each track varies by data set and preparation time. In **Data Visualization**, teams will assess and analyze **any open data set** related to a theme and present to an audience to communicate a recommendation, story or new idea. The **Data Analytics** competition will challenge participants to work on **one of the data sets** provided in advance, put their analytical skills to the test and present their insights to an audience.

Data Challenge Tracks

TEAMS CAN COMPETE IN
ANY OR ALL TRACKS!

	Data Visualization	Data Analytics
Data Sets		
Type	Open data	Choose 1 from given data sets
Data Availability	You pick	Provided by sponsors
Presentations		
Time	4 minutes	10 minutes
Elimination Round	Yes	Yes
Prizes	1st, 2nd, & 3rd place	1st, 2nd, & 3rd place
Poster Round	Infographic	Teaser poster
Prizes	1st, 2nd, & 3rd place + viewer's choice	1st, 2nd, & 3rd place + viewer's choice

8th Annual DATA VISUALIZATION COMPETITION



In this track, qualified teams will assess and analyze any **publicly-available data** related to a theme and present to an audience to communicate a recommendation, story or new idea. This allows for better decision-making and more varied solutions to problems that span a wide range of social, environmental and economic topics.

Your Goal:

- Present your data story to a panel of judges through data visualizations (charts, graphics, etc.) using any software (PowerPoint, Tableau, etc.)
- Highlight key findings in the data and offer potential solutions

PRESENTATION

Presentation rounds: Qualifier & Final

Presentation time: 4 minutes

Judge Q&A: 10 minutes

Prizes:
1st place: \$1,000
2nd place: \$500
3rd place: \$250

INFOGRAPHIC

Submission deadline: November 15, 2023
Upload file at the end of application link

Details:
Letter format (8.5"x11")
Max 1 MB
File type: PDF only

Prizes:
1st place: \$750
2nd place: \$400
3rd place: \$250
Viewer's choice: \$150

Suggested data themes:

The Impact of Covid-19:

- Housing availability and affordability in Atlantic Canada (or your region)
- Population growth in selected cities
- Office space utilization post-Covid (e.g. using Google Places data)
- Migration to New Brunswick during Covid-19
- The impact of inflation (e.g. grocery prices) from 2021-2023
- Changes in employment (quiet quitting, remote work, retirements, labour shortages)

Extreme Weather & Climate Change :

- Frequency and impacts of extreme weather events (e.g. forest fires, floods, hurricanes)
- Impacts of climate change on humans, plants and wildlife

Local Issues (can be adapted for your geography)

- Post-secondary foreign graduates: do they remain in New Brunswick?
- Entrepreneurship in New Brunswick: is it increasing or decreasing? (Background article from Globe & Mail)
- The impact of Airbnb rentals on housing in Fredericton, Moncton, and Saint John
- Effect of construction on business activity in Fredericton (or your city) (e.g. using Google Places data)

Health Care:

- Wait times for healthcare
- Access to family physicians, emergency care, urgent care
- Availability of professionals (physicians, nurses, support staff) and future trends

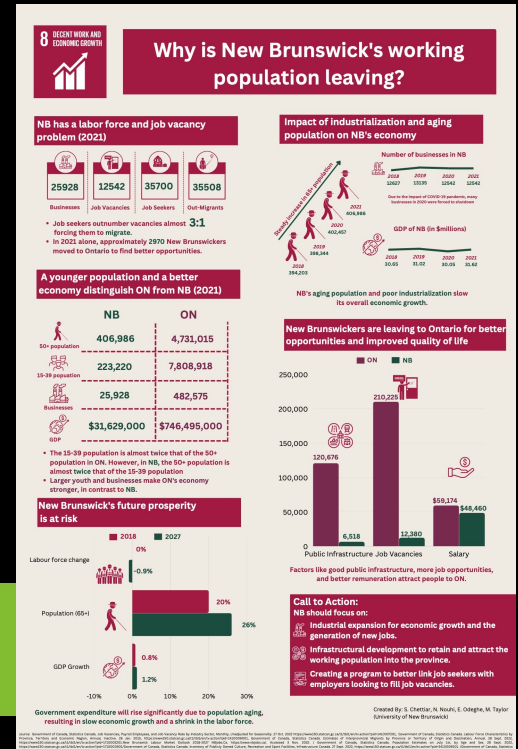
Your own theme:

You can pick your own theme as long as your data set is publicly available, relevant and timely.

Important Notes:

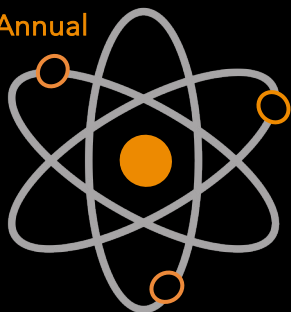
- You must use an open data set
- Feel free to use multiple data sets to tell a comprehensive story combining themes

INFOGRAPHIC EXAMPLE
2022 1st place winner,
Labor Force Retention



CRITERIA	DESCRIPTION	SCORE
Clear Purpose/Message	The team is telling a story and providing a clear and compelling take-home message from their visualization	1 to 5
Shows comparison & contrast	The team has used multiple sets of data and effectively compared and contrasted data	1 to 5
Causality and explanation is provided	Underlying reasons for differences in data are offered	1 to 5
Display	Presentation is well organized and displayed well to permit improved understanding	1 to 5
Information is layered	All components are well organized to show the relationship between the data	1 to 5
Participant can answer questions	The data is presented in such a way that the user can easily answer questions about the data visualization	1 to 5
Presentation	Connects with the audience, displaying heart and enthusiasm; convincing and confident	1 to 5

4th Annual



DATA ANALYTICS COMPETITION



In this track, teams must **choose one of our curated data sets** provided on **September 30th**, one month before competition. You will need to present your analysis and insights based on your chosen data set to a panel of judges. During your presentation, you must show all the **steps, tests, justifications, and decisions** you took to arrive at your insight/prediction. You must be able to explain these steps clearly and concisely.

Your Goal:

- Wrangle data sets so they can be used for analysis
- Select the appropriate statistical techniques to apply to your analyses, including conducting appropriate tests
- You may use any software such as SPSS, Stata, R, Python, etc.
- Correctly interpret the results
- Provide predictions and insights as if to a decision maker

PRESENTATION

Presentation rounds:

Qualifiers & Final

Presentation time:

10 minutes

Judge Q&A:

10 minutes

Prizes:

1st place: \$1,000
2nd place: \$500
3rd place: \$250

TEASER POSTER

Submission deadline:

November 15, 2023
Upload file at the end of application link

Details:

In 3 sentences/questions, generate curiosity for your presentation

Prizes:

1st place: \$500
2nd place: \$250
3rd place: \$100
Viewer's choice: \$100

Important Notes:

- You may link to any other publicly available data set if you like, but these other data sets that you bring in should serve to bring out insights in the provided data set
- You can use any method for displaying your analysis, so long as it can be presented via Zoom/Teams

TEASTER POSTER EXAMPLE

2022 1st place winner,
Team Excelerators

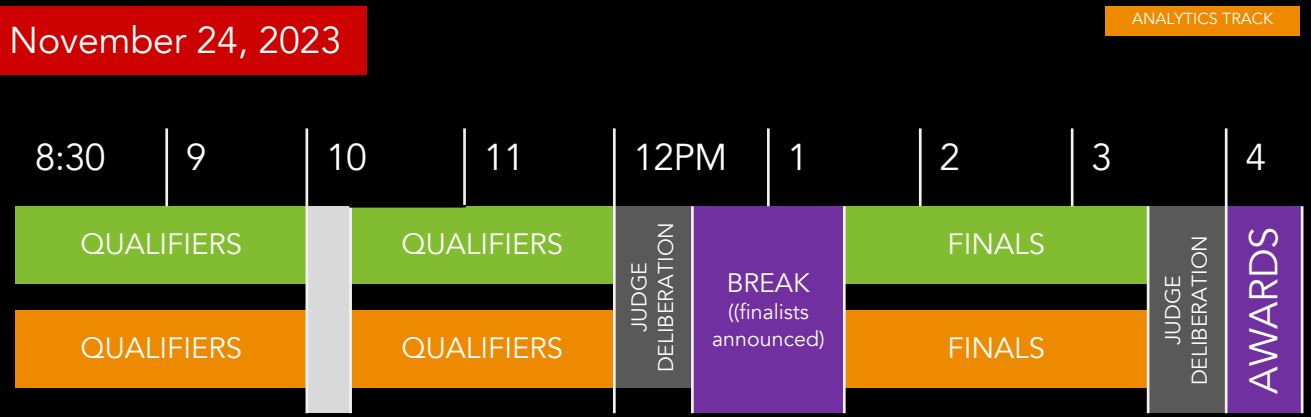
1. Are older homes energy burning machines?
2. Can the average Joe like you or me contribute to sustainability?
3. Does your neighbour across the street save more on energy than you?

CRITERIA	SCORE
Clearly articulated problem/question	1 to 3
Well-articulated research hypothesis	1 to 3
Clear rationale for choice of (a) statistical method(s)	1 to 3
Checks (i.e., normality, variance, etc.) conducted for appropriateness of method(s)	1 to 3
Consideration of privacy and ethical concerns	1 to 3
Appropriate use of charts as part of analysis	1 to 3
Clear verbal explanation of analysis	1 to 3
Correct interpretation of results (with confidence levels)	1 to 3
Clear visual presentation of results	1 to 3
Clear translation of final results into non-technical language	1 to 3

EVENT SCHEDULE

Both tracks will take place in parallel on Friday November 24th. If your team is taking part in all tracks, we will schedule your presentations at different times so you have some time between each. The final team schedule will be released in November.

Schedule (all events are virtual)

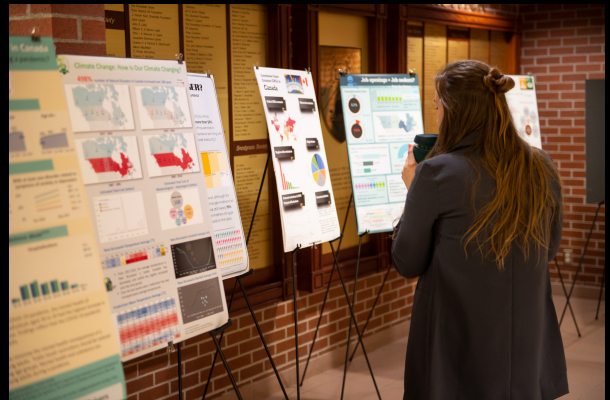


Pre-Events & Workshops (Virtual)

Nov 3: 12 – 1 PM: How To Speak Data Workshop by Ray Harris - DataWazo

See you there!

APPLICATION DEADLINE: NOVEMBER 15TH, 2023 11:59PM AST!



Questions?

Contact:

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Visit our website:

unb.ca/datachallenge



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