

Christmas Data Science Competition

Contest will begin Monday December 13, 2021 and students will have until Sunday January 2, 2021 at midnight to analyze the data and send the code and presentation of analysis to sarah.young@bethel.com.

All students in the Bethel School of Technology are eligible to enter the contest. There will be two Categories Beginner and Advanced.

Beginner – Students in the first five modules.

- Basic Statistics
- Statistical Programming in R
- Database Foundations
- Programming Foundations in Python
- Data Wrangling and Visualization

Advanced – Students in the last five modules.

- Intermediate Statistics
- Machine Learning and Modeling
- Introduction to Big Data
- Metrics and Data Processing
- Final Project

Data

[Dataset of Christmas Billboard](#)

Evaluation Questions

One of the two questions must be answered to be considered for the prize. Points will be award per question answered. The more questions you answer the more points and the more likely you are to win.

1. What can you tell me about week position?
2. What can you tell me about weeks on the chart?

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Presentation

Your presentation will have to be submitted by Sunday January 2nd, 2021, by midnight along with all code. We will have a presentation day on Saturday January 8th, 2021, at 2 PM CST where you all will have the option to present your findings, but it is not required. I encourage all of you to present if time allows because it will give you good experience.

Rules

You will be able to collaborate with other students in Bethel School of Technology Data Science Program as well or you can enter as an individual.

No help from outsiders whatsoever is allowed including family members, friends, and or data science professionals. Only students in the Bethel School of Technology Data Science Program.

Participants must answer at least one evaluation questions to be consider.

No entries submitted past midnight January 2th, 2021, at midnight local time will be accepted.

You must use the dataset that is provided to answer the questions.

Presentations should be in power point.

All work must be included. All code and all manipulated datasets.

All work and presentation must be submitted into one zip file and emailed to sarah.young@bethel.com by January 2nd, 2021 at midnight.

Entries without presentation or all work will not be considered.

Scoring

Your entry for each question will be scored in 5 categories Completeness, Accuracy, Data Interpretation, Visualization and Presentation, Analysis Difficulty. Visualization has more points because you can come up with all the data in the world but if you can not present in a way that people understand it and can utilize it, you have nothing.

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	Completeness	Accuracy	Data Interpretation	Visualization & Presentation	Analysis Difficulty
Exceeds Expectations	3	3	3	5	3
Meets Expectations	2	2	2	3-4	2
Does not Meet Expectations	1	1	1	1-2	1

Completeness

The participant has fully answered the evaluation question and has used all of the appropriate data. Every data preparation or assumption step for the analysis performed has been completed.

Accuracy

Data was analyzed using the correct tests and the results from those tests were correct.

Data Interpretation

The results of the analysis were properly interpreted, and findings were discussed in an appropriate manner. All conclusions drawn from the data logically follow.

Visualization & Presentation

Data visuals are easily understood and interpreted by the layperson and are visually pleasing.

Presentation is clean, easy to follow, and has no typos.

Analysis Difficulty

The participant will receive additional points for attempting more difficult analyses.