COVID-19 Forecasting Tournament

(Stage 2)

Thank you for your interest in participating in the Forecasting Collaborative's COVID-19 tournament. Here we describe the forecasting tournament and instructions for participation. If you have any questions, please contact us at predictions.collab@gmail.com.

ABOUT US

The Forecasting Collaborative is an international collaboration between researchers who are interested in evaluating accuracy of behavioral and social science models. The goal of the collaborative is to provide a litmus tests for existing theories and data-modelling approaches behavioral and social sciences.

The Forecasting Collaborative is organized by Igor Grossmann and Amanda Rotella from the Wisdom and Culture Lab at the University of Waterloo, in cooperation with Michael Varnum (Arizona State University), Cendri Hutcherson (University of Toronto), Louis Tay (Purdue University), Lyle Ungar (University of Pennsylvania) and Philip Tetlock (University of Pennsylvania).

General information about the forecasting tournament

Project Stages

Stage 1: First round of submissions (Complete; May 2020)

Stage 2: New and updated forecast submissions (Opens November 12th, 2020)

Stage 3: Summary and write-up of results (May 2021)

We began this forecasting tournament in April 2020 (Stage 1), where we invited teams to provide numerical forecasts for the specified variables over 12 months. Now we are in Stage 2 of this project, where we are inviting past participants to update their prior forecasts, and inviting new forecasting submissions for the next 12 months.

FAQ

1. Who can participate?

We are looking for data-driven (e.g., models) or expertise-based (e.g., general intuition, theory-based), from any field. There are no restrictions, just report your education/areas of knowledge or expertise.

2. Do predictions need to be sole-authored?

Forecasts can be submitted by individuals or teams. There are no restrictions on the number of people in a team. If there are multiple team members, the team leader should fill out the prediction survey and indicate in the team members survey that they are the team leader. All other team members are required to fill out the team member survey (for demographic information).

3. Can all team members get authorship on the resulting publication, and if so how?

All team members are eligible for authorship. Please contact Igor Grossmann (igrossma@uwaterloo.ca) or Amanda Rotella (arotella@uwaterloo.ca) for authorship requirements. Authorship order on the resulting publication will be first determined based on contributions to the project. For authors with similar contributions, authorship order will be determined alphabetically based on family name.

4. I am interested, how can I help?

Please spread the word. Advertise the call on social media, or send it to others who may be interested in participating. We'd appreciate if you retweet calls made by <u>Igor Grossmann</u> or <u>Amanda Rotella</u> on Twitter.

5. Is it expected for forecasting to be conducted based solely on this data provided?

You can use additional data if you have it handy and want to include it. You are most welcome to add any datasets you may find useful for your estimates – just tell us what you used and how.

6. Is it expected for contributors to explore their own data collection?

You are most welcome to add your own data for the forecasts if you see it as desirable. Just tell us what you used and how.

7. What is the intended use of these contributions?

We aim to categorize contributions based on approaches (e.g., data vs. theory-driven forecasts), and unpack which strategies were more likely to lead to accurate forecasts. For statistical analyses we would not be focusing on single approaches, though we hope to learn from individual approaches that led to the most successful forecasts.

8. What is the theory backing this work?

We draw on previous work on forecasting accuracy among experts by Meehl and Dawes, situating forecasts in the context of COVID-19 pandemic as a naturalistic experiment. One of the goals is to establish a benchmark of forecasting accuracy in behavioral and social sciences for societal issues over the course of COVID-19 pandemic. Another goal is to understand how behavioral and social scientists reason when making their forecasts and which reasoning strategies are more likely to be effective for forecasting accuracy.

Stage 2 - Forecasting instructions

In this folder, you will find subfolders for each variable you can make predictions for in this tournament. We are looking for numerical estimates for the next 12 months.

Each subfolder will contain:

- Excel and CSVs of past data
- A pdf describing the data source
- A word document with the questions you need to prepare to copy and paste into the survey

Please consult the <u>instructional video</u> before submitting your forecasts. In this video we review specifics about the excel file, survey questions, and survey submission information.

Making forecasts

- You can generate forecasts for the next 12 months using any method you choose (e.g., general intuition, theory-driven, data-driven, combined approach). Please enter these numbers into the excel spreadsheet, save them, then upload the completed excel document in the survey (described below).
- You can create forecasts for any number of the variables we provide

Preparing forecasting survey questions

• Using the question template in the folders, prepare answers to the questions about how you created your forecasts. Once these are prepared, you can copy/past your answers into the survey (below; step 4)

Complete forecasting survey

- The team leader should complete the forecasting survey found here.
- You will be asked to choose which variables you are predicting, upload the relevant excel files (with your forecasts), and answer the associated questions about how your forecasts were made.
- We highly recommend having the answers to the questions prepared in advance to shorten the process.
- Note that the survey cannot be saved or returned to, and must be completed in one instance, otherwise a new submission will be required.

Complete team demographic survey

- We require consent and demographic information from all participating team members.
- Each forecasting team member is required to complete the <u>team member survey</u> by the submission date (December 7th).
- This step is required to **qualify for authorship** on the resulting manuscript.

Returning Team?

Did your team participate in our Spring 2020 call for forecasts? If so, your team leader should have received an email containing individualized spreadsheets with your past predictions. Please use these spreadsheets to update your forecasts for the next 6 months, and create new forecasts for an additional 6 months. If you have any additional questions, please contact the Behavioral Forecasting Collaborative at predictions.collab@gmail.com.