Pittsburgh DataWorks is an educational nonprofit whose mission is to engage youth in the field of data science. We partner with a number of groups to make data science education freely available.























## CONTACT

Email us at: datajam@pghdataworks.org

Visit our website at: pghdataworks.org

# **DATAJAM**







#### What is DataJam?

DataJam is data science activity and competition for high school students to introduce, encourage and engage young people in data science in any subject area. It runs throughout the academic year (Aug-Apr).

DataJam was started in Pittsburgh, Pennsylvania by the educational nonprofit Pittsburgh DataWorks (pghdataworks.org), but mentoring and resources are available online and by videoconference and now teams from all over the USA can participate!

### **How Does DataJam Work?**

• Organize a team at your high school or as an afterschool club

Then work with your team as they:

- Choose a research question they are interested in
- Find datasets to analyze to answer their question
- Learn new ways to analyze and visualize data
- Make a poster and prepare a presentation
- Participate in the DataJam Finale and win prizes!
- Receive assistance every step of the way from DataJam Mentors --- college students with training to help you!

pghdataworks.org

## **ABOUT**

#### What Is The Annual DataJam Timeline?

- Aug Help your students form a team (often 3-8 youth),
  Oct have them watch an informational video, set up a
  videoconference to learn about the DataJam
- Oct Guide them in working with a DataJam Mentor to
  Nov think of a research question to study, formulate a
  hypothesis & find datasets to analyze
- Dec Make sure your team emails their proposal to: pittsburghdatajam@pghdataworks.org & uses the feedback provided
- **Jan-** Guide students in analyzing data, making **Mar** visualizations, & preparing their poster
- Apr Students submit their poster, prepare their 10 min presentation, & then they give their presentation to judges by videoconference, & participate in the DataJam Finale! And awards are given!

## **How Do Teams Keep Connected?**

Pittsburgh DataWorks produces a monthly newsletter, *The DataJam Download*, from Sept-June so teams around the country know about new resources that are available on the website, know about deadlines, meet DataJam Mentors, learn about field trip



opportunities and hear about what other teams are doing. You can sign up to receive the newsletter by email or download it from our website.

### What Are Field Trip Opportunities?

In regions where there are multiple DataJam teams, partnerships with businesses are always being developed to provide DataJam Teams with opportunities to visit companies and learn how data and data analysis is essential to a wide variety of businesses.

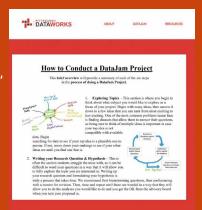
# RESOURCES

What Resources Are Available At pghdataworks.org?



The Resources page has a whole series of guides, many

by DataJam Mentors, to help guide teams through how to write a DataJam research question, find datasets, do various analyses, make great data visualizations, and overall how to conduct a DataJam project.



For your students who prefer learning by watching videos, many are available on the *Resources* page, as well as the *DataJam* page.

### Don't forget:

- Your students can view research questions and posters made by teams in past years.
- If your students are having trouble finding datasets, there are lots of data sources posted.
- Guides and videos on how to do analyses using Google Sheets, Excel, Tableau Public, R Studio and Python are available.
- Encourage your students to visit our new *Curated Datasets* for guidance on using data analysis to answer many kinds of questions.

## **MENTORING**

Who Are The DataJam Mentors?



The DataJam Mentors are college students from a wide variety of backgrounds, who are all interested in the power of data and data analysis.

DataJam Mentors volunteer their time to help DataJam teams brainstorm about research questions they could ask, find datasets to analyze, learn how to use analytical and data visualization tools, and put together effective presentations.

Your students can schedule a time to meet with a mentor on zoom, they can join the DataJam Slack channel and send messages to the mentor they are working with, or they can email a mentor.

Mentors are available throughout the DataJam process. Mentor meetings can be initiated by emailing datajam@pghdataworks.org.