## Introduction to Data Science

Have you ever wondered how numbers and information can help us learn about the world around us? In this Introduction to Data Science course, you will discover how to collect information, clean it up, and spot interesting patterns. We'll use Google Sheets to create fun charts and graphs that make data easy to understand. Together, we'll turn messy information into clear insights that answer questions about real-world topics. By the end, you'll be able to explore new ideas using data, just like a detective solving a mystery. For more information, visit <a href="https://lucasraicu.github.io/teaching/data-science.pdf">https://lucasraicu.github.io/teaching/data-science.pdf</a>.

# Learning Objectives:

- Discover What Data Is: Learn that data is information we collect about the world around us, like numbers or facts.
- Gather Information: Find out how to collect data, whether it's from surveys, observations, or simple experiments.
- Organize and Clean Data: Practice sorting and tidying up information so it's easy to read and understand.
- Use Google Sheets: Explore how to make simple charts and graphs to show what the data looks like.
- Spot Patterns and Trends: Learn to look for patterns in the data that help answer questions about real-life topics.
- Communicate Findings: Share what you discover with others, using clear charts, graphs, and explanations.



#### Pre-requisites:

No computer science or coding experience needed

#### **Target Audience:**

• 3rd grade through 6th grade

### Proposed time:

90 minutes

#### Instructor:

Lucas Raicu, Junior at Glenbrook South High School (GBS)



Lucas is a junior at Glenbrook South High School (GBS). He has taken a rigorous college preparatory curriculum that includes Algebra 2, Precalculus, Advanced Placement (AP) Calculus, Biology, Chemistry, Physics, Computer Science Honors, AP Computer Science, and Foundational Artificial Intelligence. He is aiming to pursue an undergraduate degree in computer science with the ultimate objective of earning a PhD and becoming a university professor. He is deeply passionate about music, sports, and academics. He holds prominent roles in the soccer and tennis

program, while also leading the symphonic orchestra as the co-assistant concertmaster. He finds joy in playing chess and ping-pong with his friends, as well as skiing in the winter. Even though he is only sixteen years old, he always strives to become the best version of himself.