

How Are Al Models Trained? Activity Plan

Overview

In this activity, students explore how AI models learn from training data through hands-on simulations. They will see how examples shape AI predictions, test their own training sets, and reflect on how data quality affects accuracy and fairness.

Recommended Grade Level(s): 9-12 Recommend Age Range: 13-18

Activity Length: 1 hour

Experience Level: Beginner

Technical Requirements

- Device Requirements
 - o 1 computer per student during class (Mac, PC, Chromebook all work great!)
 - o Online connectivity at a minimum of 10Mb/sec
 - Modern browsers on computers
 - Chrome
 - Firefox
 - or Safari Version 15.1 or higher
- Tool Access
 - Access to the Hour of Al interactive training simulation (link provided in activity)
 - o <u>Teachable Machine</u>
- Note on Student Accounts:
 - Students will complete the activity on the CodeHS platform. Students do not need to create an account or log in to access this activity, however they will not be able to save or return to their work later unless they are logged in to CodeHS. See optional instructions on how to set students up here:

codehs.com/hoai account setup

Activity Materials

Teacher Resources:

• Lesson Plan

Student Activity:

• codehs.com/hourofai/howaremodels

Content Standards

- **CSTA 1B-DA-06:** Organize and present collected data visually to highlight relationships and support a claim.
- **CSTA 2-DA-07:** Represent data using multiple encoding schemes.



- **CSTA 2-DA-08:** Collect data using computational tools and transform the data to make it more useful and reliable.
- **CSTA 3A-DA-11:** Create interactive data visualizations using software tools to help others better understand real-world phenomena.

Teacher Instructions

- Before the Hour of Al:
 - Review the technical requirements for this activity and teacher lesson plan
 - (Optional) Set up your free teacher account if you plan to have students create accounts
- During the Hour of Al:
 - o Direct students to codehs.com/hourofai/howaremodels
 - Allow students to work through Hour of Al at their own pace, providing encouragement and support when needed.
- After the Hour of Al:
 - Did you know that CodeHS offers K-12 Al curriculum, PD for teachers, and classroom tools? Go to <u>codehs.com/ai</u> to learn how you and your students can continue learning about Al.

Need Help?

Email support@codehs.com to get in touch with our support team!