SHOULD WE

HACK

HUMANITY?

VIDEO & DISCUSSION GUIDE

North Carolina School of Science and Mathematics
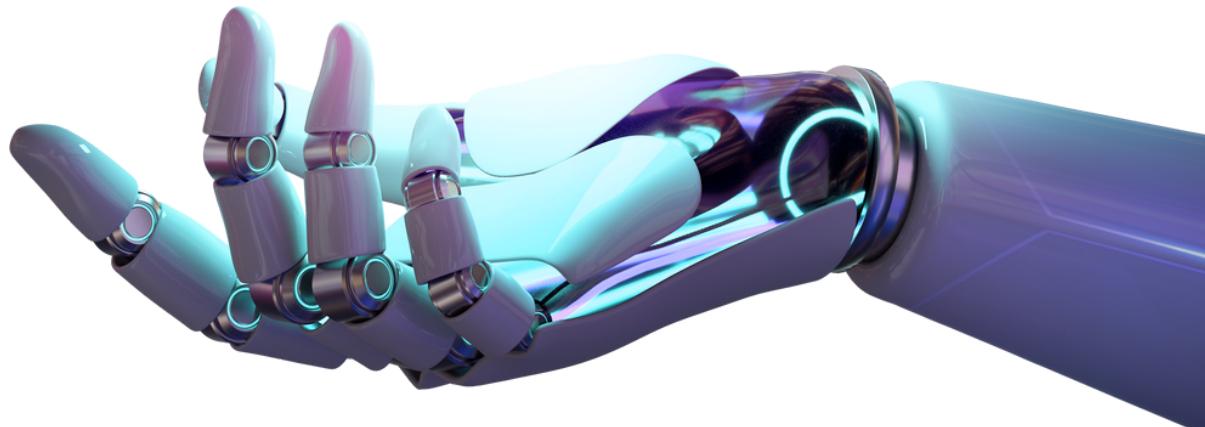
spark NC

SHOULD WE
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2O22 ETHICS &
LEADERSHIP
CONFERENCE

About the Conference

On October 31st, the 2022 Ethics and Leadership Conference: "Should We Hack Humanity?" was presented as an in-person and virtual event at the Durham Campus of the North Carolina School of Science and Mathematics (NCSSM) in partnership with SparkNC. The purpose of the conference was to engage 9th- through 12th-grade students from across North Carolina in the emerging conversation about ethics in high-tech fields such as artificial intelligence and data science.

The event featured expert speakers, including:

- Noelle Silver Russell - IBM
- Renée Cummings - University of Virginia
- Charlotte Dungan - The AI Education Project

Information about these speakers, conference resources, AI and ethics learning tools, and more are available at sparknc.org.

In this Guide: Videos, Discussion Prompts and More!

Conference session recordings are available through this YouTube playlist and are linked to in the discussion guide for each session, below.

The discussion guides provide a summary of each session topic, links to the videos, discussion prompts, facilitation practices to support discussion and links to additional resources.

More resources from the conference and about ethical tech are available at: sparknc.org/shouldwehackhumanity.

HUM**AI**N: EMPOWERING INCLUSION WITH TECHNOLOGY

SHOULD WE HACK HUMANITY?

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Description:

In this session, Noelle Silver Russell kicks off the ELC 2022 conference by sharing how her own personal background and story pushed her to help build more inclusive technologies. Additionally, she speaks about some of the unintentional consequences of building a popular, AI-powered, household technology.

Discussion Questions:

1. How can AI improve the future of work?

2. What are some ways to use the technology we spoke about to help people have a better life experience?

3. Noelle helped build technology that would help the people she loved. What is a technology you might create or dream up that would help someone you know?

4. What are some concerns you have about how AI is being used today?

5. What problems in our world would you tackle with these technologies?

6. Noelle told the story about Amazon Alexa and how some young girls were bullied as a result. What are some other instances you can think of when technology caused purposeful or accidental harm?

7. Why is it important for the people who create technology to think about how it might impact others?

8. What is our role as consumers to support ethical technology and make sure we give credit to people's ideas?

Teaching Strategies
(Click Icons for Directions)

Connect, Extend, Challenge

Surprising, Interesting, Troubling

Silent Debate (Gallery Walk Variation)

Snowball Fight

ADDITIONAL STRATEGIES:
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AI
IN YOUR
NEIGHBORHOOD

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Description:

In this session, Renée Cummings discusses her varied career path before she landed on the study of justice, privacy, and technology. She advocates the importance of interdisciplinary perspectives as society moves towards a new, technological frontier. Noelle and Renée sit down to take questions from high-school students and explore answers to questions such as "how do you realistically view the future of technology and how does that concern and excite you?"

Discussion Questions:

1. Renée Cummings described her career journey. What about her description surprised you or was different than you expected?

2. What do you think Renée means when she describes the "interdisciplinary imagination?" Why is interdisciplinary imagination important when we speak about ethics and technology?

3. How might you "invite yourself to the party" of data and tech ethics? What unique perspectives and communities would you bring to the conversation?

4. What are some concerns you have about how data is collected and shared?

5. Why is it important to create equitable and inclusive technology? Who benefits from this?

6. What do you predict will be the future of technology?

7. What was exciting about Noelle's and Renée's predictions for the future of tech? What was scary about their predictions?

8. "Privacy is dead." What are your reactions to this statement? What examples have you seen of this in your life?

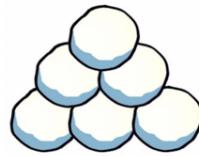# Teaching Strategies
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AI
IN THE
EXAM ROOM

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Description:

In this session, Charlotte Dungan explores questions surrounding technology, medicine, and ethics. In doctor's offices, AI tools are recording your visit. If you take a vacation to Disney World, they collect biometric information such as your fingerprint. At-home DNA testing and newborn genetic screening results in the government and for-profit companies storing your genetic information. This session helps students consider who has access to our bodily data, what they can do with it and why we should care.

Discussion Questions:

1. What role do you think privacy should have in your healthcare? How is AI transforming medicine and what is its impact on patient privacy?

2. Charlotte described a tool in the doctor's office that listened in on the visit. How does that make you feel? Why does it make you feel that?

3. Why do you believe Disney and other corporations would gather data such as fingerprints? What positive and negative outcomes might it lead to?

4. What could be some benefits to a "social credit score" like one used in China? What could be some drawbacks or negative outcomes?

5. What are some of the benefits of doctors being able to determine someone's race from an X-ray? What are the negatives of being able to do so?

6. "The idea of these technologies is not that they are good or bad, but that they can be used for good or bad." What laws, regulations, and policies do you believe should be created to protect medical data held by for-profit corporations?

7. After the talk, are you more or less likely to test your DNA on a service like 23andme? Why or why not?

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HANDS ON: TOOLS FOR CREATING WITH AI

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Description:

In this session, Charlotte Dungan introduces a variety of artificial intelligence music, art, and writing tools and walks students through how to use them, what they are for and ethical issues related to their use.

AI Tools:

Images/Art
- Quickdraw.withgoogle.com - A tool for quick sketches
- Autodraw.com - Easy to use drawing tool
- Pinscreen.com (or Pinscreen App) - Create a 3D avatar using a selfie
- Crowdsource.Google.com - Image labeling to improve Google tools
- https://discord.gg/midjourney - Create photorealistic images
- Discord openai.com/dall-e-2/ - Create realistic images from a description

Music
- www.vocaloid.com/en/ - Free trial version available
- Aiartists.org - Curates AI art and AI art tools

Writing
- deepai.org/machine-learning-model/text-generator - Generate text from a prompt

Articles to Encourage a Conversation on the Ethics of AI Tools:

- A New AI Chatbot might do your homework for you. But it's still not an A+ student.
  - https://www.npr.org/2022/12/19/1143912956/chatgpt-ai-chatbot-homework-academia

- He Made a Children's Book Using AI. Artists Are Not Happy.
  - https://time.com/6240569/ai-childrens-book-alice-and-sparkle-artists-unhappy/

- Man Fakes His Entire Life for a Month with Convincing AI-Generated Images
  - https://mymodernmet.com/kyle-vorbach-ai-generated-life/

- People Are Not Happy that the San Francisco Ballet Used AI-Generated Art to Promote the Nutcracker
  - https://sfstandard.com/arts-culture/people-are-not-happy-that-the-sf-ballet-used-ai-generated-art-to-promote-the-nutcracker/

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Description:

<u>In this session</u>, Noelle Silver Russell, Renée Cummings, and Charlotte Dungan speak about their individual paths to careers in tech, including their own challenges and how they chose to overcome them. They speak about their "bad days" and what they learned from them. And they share encouragement for others who are not sure they should be in high-tech fields to "invite themselves to the party."

Journal Questions:

1. What struggles or situations have you had to overcome in the past on your own path?

2. Describe a "bad day" you've had. How did you deal with it and what did you learn?

3. What advice stood out to you from the speakers? Why did it stand out to you?

Discussion Questions:

1. How did each of the speakers turn difficult situations, personal struggles, and other people's biases into positive learning experiences during their careers?

2. How did the speakers change your current perceptions about available tech careers?

3. What advice stood out to you from the speakers? Why did it stand out to you?

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