



NATIONAL ENGINEERS WEEK 2022

5G Technology



Learn more about the 5th Generation (5G) mobile network and how engineers impact our world. [START EXPLORING HERE!](#)



MEET OUR INDUSTRY EXPERT

ANDREW (ANDY) CASO
I.T. Quality Engineer >> Verizon



Click on the **green gear** to view our expert's video and learn more about 5G Technology. Currently, Andy leads software-quality engineer teams throughout the US and India. Also, as a co-author, he holds a patent for a solution to test virtual network elements.



STRETCH YOUR LEARNING



[View NAF's Engineers Week playlist](#)

EXPAND your engineering knowledge and capacity:

- Check out [Everything You Need to Know About 5G](#) and [How Exactly 5G Works](#).
- Check your learning, after watching the videos, by completing the [5G Nearpod](#).
- Read [Building Your Own Cellphone Network Can Be Empowering & Problematic](#).
- Complete the Innovation Challenge below. ↓



COMPLETE THE CHALLENGE TO WIN

SHARE FOR A CHANCE TO WIN \$100

Before 3/31/22, share the URL of your completed project presentation [HERE!](#)

SHOWCASE YOUR PROJECT

Check out NAF's Showcase Choice Board on the next page for presentation ideas.

ACCEPT THE INNOVATION CHALLENGE

Deepen your learning by innovating a project solution. Check out the challenge details on the next page.



IMPACT SURVEY FOR EDUCATORS: Scan or click the QR code to share your feedback and for a chance to win \$100.





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Innovation Challenge: 5G Technology



ACCEPT THE INNOVATION CHALLENGE

Think about what a 5G town-of-tomorrow would look like, then design one aspect of the town (e.g., health services, public service, education, utilities, or recreational) using a free design platform like [Tinkercad](#), [Blender](#), or [SketchUp](#). Consider the placement of microcells (lamp posts) and use-cases like driverless public transportation, smart-city traffic monitoring, power, parking spaces, irrigation, or security. Illustrate how 5G impacts the people of your town-of-tomorrow. (To extend the project, collaborate with a team, allow each member to design different aspects of the 5G town of tomorrow, and showcase it as a group.)

SHOWCASE YOUR CHALLENGE PROJECT

Bring your project to life by sharing your learning with a global audience! Present your learning journey using the Showcase Choice Board below. Then, generate a URL to share with your class, a mentor, an industry partner, and NAF!



Choice 1: [Create a YouTube video](#) to detail your learning through the project challenge.

Choice 2: Create a [blog](#) to highlight your project and learning journey.

Choice 3: Create a career-readiness digital portfolio to showcase your project and learning journey using [Bulb](#) or [Google Slides](#).



Photo Credit: Disney

Meet Lanny Smoot, a Walt Disney Imagineer! He has 100 U.S. patents, and is considered "[one of the most prolific Black inventors in American history](#)." He strives to inspire Black youth to chase STEM careers.

Choice 4: Produce a [PechaKucha](#) (a 400-second visual story) to showcase your project and learning journey.

Choice 5: Code or create a simple webpage to showcase your project. Consider [Replit](#) or [Wix](#).

Choice 6: Showcase your project in a format of your choosing.

SHARE THE URL OF YOUR PROJECT SHOWCASE

Scan or click the QR code to complete the submission form and for a chance to win a \$100 gift card for you AND your educator.



For more information, please contact [Christine Rodriguez](#).