



National Aeronautics and  
Space Administration



# EXPLORE SCIENCE

**Former STEM Enhancement in Earth Science (SEES) Interns Win Top Prize in Data Visualization and Healthcare Solution Categories in AWS Data Exchange Challenge**

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October 23, 2020



# Former STEM Enhancement in Earth Science (SEES) Interns Win Top Prize in Data Visualization and Healthcare Solution Categories in AWS Data Exchange Challenge

VIDEO

COLLABORATORS

TAKE ACTION

COVID-19 Health Vulnerability Mapper

**Access and Equity**

**Introducing:** An interactive mapping tool that illustrates how certain demographics—including low-income communities, ethnic minorities, and immigrants—have been disproportionately affected by the COVID-19 pandemic. We're inviting you to explore the geography of this social justice issue with us, and learn how to combat it, as outbreaks evolve in real time.

Launch Interactive Map

**Search for locations.**

Browse and search the map to find a community, whether its your own or across the country.

**Explore the data.**


Use tools to analyze the spread of outbreaks in real-time relative to social vulnerability in an intuitive, visual, tangible medium.

**Learn about injustices.**

Discover communities disproportionately impacted by the COVID-19 pandemic and how they compare to the rest of the United States.

**Drive action in your city.**


View our repository of resources to figure out how you can play a part in bridging inequality.



FRONTEND DEVELOPMENT

**ETHAN MCFARLIN**


Ethan is a student from Colorado Springs, CO who goes to Harvard College.



BACKEND DEVELOPMENT

**IRIS XIA**

Iris is a student from Saratoga, CA who goes to Stanford University.

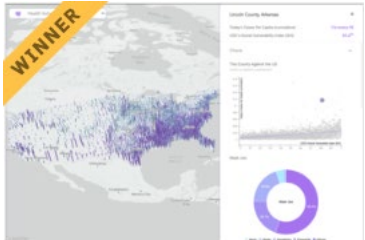


FULLSTACK DEVELOPMENT

**SEAN YANG**




Sean is a student from Houston, TX who goes to Harvard College.

WINNER



**Access and Equity: Health Vulnerability Mapper COVID-19**

We're presenting an interactive map-based web application that highlights



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Former SEES Interns, Ethan McFarlin, Iris Xia, and Sean Yang, who were a part of the 2019 Emergency Preparedness Team, competed in the 2020 AWS Data Exchange Challenge. The main requirement of the challenge is to build (or update) a data-driven solution that tells a story by employing at least one of the categories using: 1) at least two AWS services, and 2) at least one of the 3<sup>rd</sup>-party data products from AWS Data Exchange providers.



**AWS Data Exchange Challenge**

WINNER

Best in Data Visualization

WINNER

Best Healthcare Solution

Their project is titled “**Access and Equity: Health Vulnerability Mapper COVID-19**”, an interactive map-based web application that highlights the relationships between socioeconomic disparity and COVID-19 across the U.S. in an intuitive, real-time, & tangible medium.

<https://devpost.com/software/covid-19-medical-justice>