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# **AI NEWSLETTER FOR K-12**



#### Hi Kids,

We are a personalised Edtech company that teaches AI and Coding to children in the K-12 grade band. It's our mission to equip you with a deep conceptual understanding of AI and Machine Learning so that you can either choose a career in Data Science or use it in the discipline of your choice. As you may be aware, today AI is used in various fields - from Health, Agriculture, Art, Marketing to practically all industries.

It's over 2 years and Covid-19 is still a part of our lives. However, a lot of the progress in understanding and managing this pandemic has been expedited due to the application of Al. Did you know that Al has been used not only for diagnostic purposes, but also for tracking the spread of the disease, availability and management of health care equipment, cataloguing and retrieval of research papers and many more use cases.

In this issue, we have a live talk by Daniel Lindenberger where he shares his experience as a volunteer at CoronaWhy and he has also shared some of the CoronoWhy datasets that one can tinker with and learn from at ones's own pace.

We have curated articles and simple videos to showcase how AI helped our doctors, the government and the researchers to understand this virus better and help society at large.

As the world has moved on to a hybrid platform, where technology will always be a part of children's learning, it is imperative that we reiterate digital safety practices and keep them safe online. For parents and educators we have a comprehensive article on page x.

We would also love to hear from you. Do write in with your opinions, share projects and send us your articles.

Coding and More believes that learning should be fun!! We hope to take learning beyond the classroom and make it real and impactful. In particular, the kids corner is one of my personal favourites as I see children apply technology to subjects of their personal interest and passion. When a child links machine learning to his/her favourite subject in school or a personal hobby - as educators we know we have ignited the spark.

We hope you enjoy reading this as much as we enjoyed making it. Supriya Bhuwalka

For more information on classes and curriculum: https://forms.gle/dD435SkEEZiqQ4c59

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## AI NEWSLETTER FOR K-12 IN THIS ISSUE

## Pg 1

Al in Covid - 19 - An Interactive Live with David Lindenberger Use of Al to track the pandemic Health Diagnostics - Various applications





Pg 2 Equity & Accessibility Enhanced by Al Kaggle Datasets to Tinker

Pg 3 NLP for prediction of Protein Structure Omicron Unravelled



**Pg 4** Kids Corner - Unscramble

Pg 6

Children's Project

**Parent Speak** 



**Pg 5** Resource for Parents & Educators - Digital Safety

Guide



Maintain social distancing

Limited Seats - start\_learning today: https://forms.gle/dD435SkEEZiqQ4c59

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# AI BYTES

The Applications of Al in Covid-19 An Interactive live with Daniel Lindenberger Understand the different use cases of Al in helping conquer Covid-19

As the third wave of Covid -19 took all of us by surprise, people around had mixed emotions - some of despair, some fear and some a laissez faire attitude. One thing though was certain that without Al - our researchers and doctors would not have made the headway they did this pandemic. To learn more about the various applications of Al - tune in <u>here</u>.



Did you know that scientists in Canada had already used AI and data from airline and medical information to predict the beginning of a new pandemic? <u>Click here</u> to understand how AI was used to track and help find new treatments for Covid-

One of the first and critical steps in an infectious pandemic is to identify, isolate and treat infected patients. Click here to see how doctors were able to use the power of AI in the field of diagonistics.



Hiring Alert!!! Would you like to come teach with us?

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5 Covid-Driven A.I. Trends That Are Changing Health Care

Closing the gap between in-person and virtual visits is just the tip of the iceberg

This is an insightful article that showcases not only how AI helped the healthcare system become more efficient but also how technology is lowering the cost of quality healthcare and bridging the accessibility gap making medical care more equitable. <u>Click here</u>

### **Datasets to Experiment**

Enclosed below are 4 kaggle datasets shared with us by CoronoWhy

Below are the four questions we focused on, with a link to each of the notebooks. Transmission, incubation and environmental stability

https://www.kaggle.com/crispyc/coronawhy-org-task-transmission-incubation

Human risk factors

https://www.kaggle.com/arturkiulian/coronawhy-org-task-risk-factors Vaccines and therapeutics

https://www.kaggle.com/benjpjones/drug-treatment-extraction-taskvt

Geography and virality

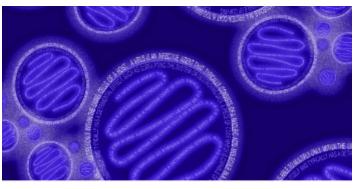
https://www.kaggle.com/manuelalvarez/coronawhy-org-task-geographical-factors

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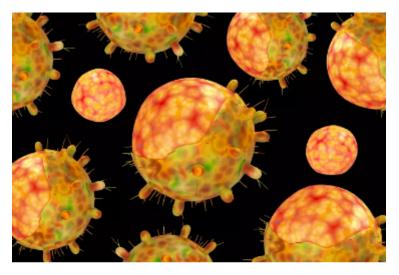




Als that read sentences are now catching coronavirus mutations

NLP algorithms designed for words and sentences can also be used to interpret genetic changes in viruses—

NLP - a cool AI tool that powers chatbots is used to predict mutations in the virus. Click here to learn more.



This AI Software Nearly Predicted Omicron's Tricky Structure

New algorithms that decipher complex sequences of

Using data and machine learning, lead researchers in the USA were able to predict the omicron mutations - <u>click here</u> - these headways pave the way for further research.

Limited Seats - start learning today: https://forms.gle/dD435SkEEZiqQ4c59





## UNSCRAMBLE

A fun puzzle to test your Al vocabulary and then unravel another interesting word for machine learning geeks.

UDSPIRSVEE
GTANINRI
IANLSCFTSIOACI
4
SIRGEENRSO
8
MOELD
AORHLTMIG
<u> </u>
DCNIOG
CPEINOIDTR
YARAUCCC
9

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# PARENT'S CORNER

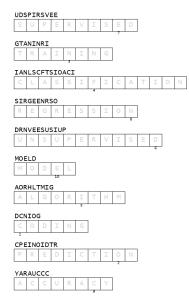




27 Classroom Tips and Activities for Digital Citizenship Week

Discover 18 tips and 9 activities to help your students gain control of their digital lives in ways that connect to nine

This is a comprehensive resource for parents and educators to bookmark and educate their young ones to keep the children abreast in digital safety and ettiquete. <u>Click</u> here



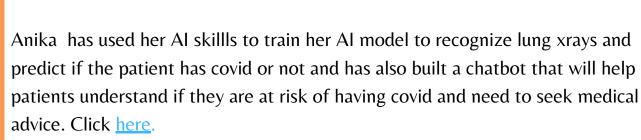
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**Answer Key** 

# **KID'S CORNER**

Dear Kids,

This is your corner. please feel free to write in, share your projects, poems, stories, questions about AI!



Anika Shah, Hillspring International

## **Parent's Speak**

I am happy to say that it has been a great experience so far with Beesan finishing two full modules of AI. She is currently working on her third. The staff has been very cooperative and transparent about the course. I am able to follow up on my daughter's progress through immediate feedback after every lesson. The teacher is very professional and friendly – and Beesan always looks forward to her class. I am sure that with Coding & More, Beesan will fulfill her love and passion in this field. These courses will definitely help her in her future studies.

Laila Qadan(mother)

(UAE - Emirates International School Jumerirah - Year 9)

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