Best of Last Week: Extraterrestrial life, Surface Duo specs, and a low-energy neural network training system

May 25 2020, by Bob Yirka

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It was a good week for space science as an international team of researchers studying data sent back by the Curiosity Rover found clues of a chilly ancient Mars buried in rocks—some minerals in rocks

suggested evidence of an ice-covered lake. In somewhat related news, a European team claimed to have solved the mystery of lava-like flows on Mars—they found the flows were instead the result of mudslides. Also, an international team of researchers used Bayesian inference to estimate the odds of life and intelligence emerging beyond our planet—they calculated the odds to be 9:1 or higher for life existing elsewhere and 3:2 that it is intelligent.

In technology news, a team at Nvidia Research reinvented the video game Pac-Man to celebrate the 50th anniversary of its release—and they did it using a neural network instead of coding. Also, a team at Rice University modified its Early Bird neural network training system to use 10 times less energy. And a combined team from Seoul National University and Korea Advanced Institute of Science and Technology developed a type of deep-learning-enhanced e-skin that can decode complex human motions such as rapid finger movements from a distance. Also, Microsoft posted some details of its soon-to-be-released Surface Duo smartphone on the Windows Central website—the foldable, dual-screen phone will have 1800 x 1350 resolution and will run on a Qualcomm Snapdragon 855 system on a chip.

In other news, a team of researchers from multiple institutions in China announced that their first human trial of a COVID-19 vaccine showed it to be safe and that it induced a rapid immune response. And a team at the IBS Center for Climate Physics ran supercomputer model simulations that they claim reveal the cause of the Neanderthal extinction.

And finally, if you are like billions of others venturing outside of your home in a way that will keep you safe from COVID-19, you might want to check out a study by pair of researchers at the University of Nicosia—they found that six feet of separation is not far enough to stop virus transmission in light winds.