Best of Last Week—Submerged ancient bridge found in Spain, LLMs exhibit covert racism, algorithm makes spacecraft safer

September 2 2024, by Bob Yirka

Close-up view of the submerged stone bridge from Genovesa Cave, Mallorca, Spain. Credit: R. Landreth

It was a good week for behavior research of ancient humans, as a team of Earth scientists from the U.S. and Spain reported that a submerged

ancient bridge discovered in a Spanish cave sheds light on human colonization of the western Mediterranean. They found it occurred much earlier than previously thought. And a pair of archaeologists with the Norwegian University of Sciences and the University of London described the excavation and interpretation of three Iron- and Viking-age mortuary houses located in central Norway, Skeiet, in the village of Vinjeøra. Researchers Raymond Sauvage and Richard Macphail found that the three structures were unique in that they allowed the living to repeatedly visit the dead.

In technology news, an international team of electrical and computer engineers developed a two-dimensional, low-power-consumption field-effect transistor for reducing smartphone recharging cycles. And a small team of AI researchers with members from the Allen Institute for AI, Stanford University, and the University of Chicago, all in the U.S., found that popular LLMs exhibit covert racism against people who speak African American English. Also, a team of researchers at MIT made a battery breakthrough that happened as the group was studying disordered rock salts—one that could deliver high energy density at high voltages with significantly improved cycling stability. And a study by a team at the U.S. Department of Energy's Oak Ridge National Laboratory led to what the group describes as a solid-state electrolyte advance that could double energy storage for next-gen vehicles.

In other news, a team of neuroscientists in Finland and Germany discovered where love lives in the brain. And an international team of researchers using data from a NASA suborbital rocket discovered a long-sought global electric field on Earth. Also, a combined team of cognitive scientists from Queen Mary University of London and University College London found evidence that noncognitive skills such as motivation and self-regulation are as important as intelligence in determining academic success. And finally, a team of space engineers at CIT developed a new algorithm that could enhance autonomous

spacecraft safety.

Citation: Best of Last Week—Submerged ancient bridge found in Spain, LLMs exhibit covert racism, algorithm makes spacecraft safer (2024, September 2) retrieved 13 September 2024 from https://sciencex.com/news/2024-09-week-submerged-ancient-bridge-spain.html