LINCOLN LABORATORY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Technology in Support of National Security

october**2023**

October Newsletter from the Technology Ventures Office at MIT LL

Latest Tech/Capabilities

Researchers map chemical plumes in multiple dimensions Learn more!

Latest in Issued Patents

➲ **ALUMINUM SLURRY FUELS AND THEIR METHODS OF USE**
Methods of making and using the aluminum slurry fuel an energy source for various applications and/or for generating hydrogen for other applications.

Newsletter Highlights

RECENT NEWS

A method to interpret artificial intelligence might not be so interpretable after all
Read more!

MIT LL FACILITY FEATURE!

MIT Lincoln Laboratory Supercomputing Center (LLSC)
"Novel tools help cut down on energy use in data" centers"

Learn more about available Lincoln Laboratory testing facilities HERE

USING A GENERATIVE ADVERSARIAL NETWORK TO REDUCE SPECKLE IN RADAR IMAGERY

Researchers at Lincoln Laboratory and MIT Computer Science and Artificial Intelligence Lab (CSAIL) have developed a novel machine learning method for reducing speckle in synthetic aperture radar (SAR) images. Speckle, the granular "spotting" inherent in SAR imagery, inhibits analysts' ability to interpret an image.
Read more!

FINDING FAMILIAL CONNECTIONS IN A MIXED DNA SAMPLE

Lincoln Laboratory collaborated with partner Verogen to develop a process for identifying familial connections using samples containing DNA from two people and existing genealogical databases. Applying mathematical computation and machine learning algorithms, this deconvolution method is a breakthrough for forensic DNA casework, allowing analysts to decipher samples with DNA from two contributors. Read more!

REGISTER TODAY!

13–16 November
MIT LL's 5th Annual RAAINS* Workshop: Reflections and Futures

URL: https://llevents.ll.mit.edu/raains/
Username: RAAINS23!
Password: MITLL23!

RAAINS: **Recent **A**dvances in **AI** for **N**ational **S**ecurity*

In 1962, Lincoln Laboratory designed and constructed a sequential encoder-decoder (SECO), a convolutional encoder and sequential decoder for a two-way communications system.

Visit the Conferences & Events Webpage for Up-To-Date Full Workshop and Conference Information at MIT LL

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