

THE NetworkGuy

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The Future of AI: How Artificial Intelligence May Change the World

Innovations in the field of artificial intelligence continue to shape the future of almost every industry. Here's how:

AI in Healthcare – AI will help identify diseases more quickly and accurately, speed up and streamline treatments and drug discovery, and monitor patients through virtual nursing assistants.

AI in Finance – AI will have a range of applications, like detecting fraud, conduct audits, gauge risk for investments, and evaluate customers for lending decisions.

AI in Manufacturing – Industrial robots will work alongside people for tasks such as assembly and stacking. Predictive analysis sensors will keep equipment running smoothly.

AI in Education – AI's use of machine learning, natural language processing and facial recognition will help digitize textbooks, detect plagiarism, and gauge the emotions of students to help determine who is struggling or bored.

AI in Transportation – Even though autonomous vehicles aren't perfect, advancements will one day allow them to transport us from place to place. AI travel planners may also change how we plan vacations and traveling.

AI in Customer Service – Data-driven tools will bring meaningful insight to power the customer service industry in the form of advanced chatbots and virtual assistants.

The Network Guy Quiz Challenge

PenTeleData is giving one lucky winner a \$150 Amazon Gift Card. Just visit www.ptd.net/quiz-challenge by **March 31, 2025** to answer the contest question. We will select a winner at random from all correct entries. **Good Luck!**

Click the **Quiz Challenge** link to figure out which picture or video clues are distinguishable to a deepfake.

Learn from The Network Guy

What is a deepfake?

The Network Guy:

A deepfake is a video or picture created by using computer software that looks almost indistinguishable from the real deal. Deepfakes have several uses, including movie production, but not all deepfake technology is benign. Deepfake pictures or videos can be used to make politicians and other public figures do or say anything, spreading falsehoods, destroying a company's reputation, interfering with elections, and altering public health initiatives.

As the technology of deepfakes advances, so will the difficulty of identifying them. Although it isn't always easy, here are a few things that should raise concern:

- Unnatural eye movement
- Unnatural facial expressions
- Awkward facial feature positioning or body movements
- A lack of emotion
- Unnatural coloring, teeth, or hair
- Blurring or misalignment of any kind
- Inconsistent audio and noise
- Video that looks unnatural when slowed down
- Hashtag discrepancies



Things That Make You Go Hmmm...

The “404 Not Found” error message, commonly seen on the Internet, was named after Room 404 at CERN, where the World Wide Web was created. It was the room where the first web server was housed.

In 1936, Russia built a computer that ran on water. It was named The Water Integrator. The Water Integrator was an early analog computer built in the Soviet Union in 1936 by Vladimir Sergeevich Lukyanov. It functioned by careful manipulation of water through a room full of interconnected pipes and pumps. The water level in various chambers (with precision to fractions of a millimeter) represented stored numbers, and the rate of flow between them represented mathematical operations. This machine was capable of solving inhomogeneous differential equations.

The original Xbox included sound snippets of real space missions. When on the home screen, you would eventually hear transmissions from the Apollo missions.

MySpace lost almost all data pre-2016 due to a server migration that accidentally corrupted the files, all data uploaded between 2003 and 2015 was wiped.

The first YouTube video ever uploaded was titled “Me at the Zoo.” It was uploaded on April 24, 2005, by YouTube co-founder Jawed Karim.

A Petabyte is a lot of data. A petabyte (PB) equals 1024 terabytes (TB). Imagine a 1 PB hard drive holding 13.3 years of HD-TV video or the entire written works of humankind in all languages!

Deepfake technology can realistically alter videos, making people say and do things they've never done.

Google's AI, DeepMind, learned to play over 50 classic Atari games just by watching them, without any prior knowledge.

“Luck’s a revolving door, you just need to know when it’s your time to walk through.”

- Stan Lee

PenTeleData is Proud to Serve Minersville, PA

Expanding former trails used by Native Americans, travelers moving between the growing communities of Sunbury and Reading in the state of Pennsylvania moved most efficiently along the Sunbury Trail in the mid to late 1700's. As the first road through what would later become Schuylkill County this Sunbury Trail received authorization from the Crown of England, King George III, in 1770 to become part of the King's Highway. It was approximately half way along this trail, between Sunbury and Reading, that Thomas Reed decided to build himself a log cabin and then a sawmill in the year 1783. He then established a tavern on the south side of the trail for weary, rest-seeking travelers.

Although timbering became a logical occupation for those who decided to join Reed near his settlement, it proved to be a difficult experience getting the lumber to market. When Necho Allen accidentally discovered coal nearby in 1799 it didn't take long for the mining industry to take over. In 1818, Thomas Reed's son, Jacob, opened a mining operation near his father's original dwelling. The need to fuel the industrial revolution placed a high premium on the rich anthracite coal that seemed to be in abundance. Soon thereafter, when Henry Clay helped passed legislation that allowed the railroad to provide a means to transport the coal from the region, settlers from near and far flocked to the area.

English and Welsh immigrants, followed by those from Germany and Ireland, who brought mining experience from their home lands, became some of the first settlers to this area in east central Pennsylvania. The predominance of the occupation gave rise to a name for Thomas Reed's growing community as well as a need for some type of municipal planning. On April 1, 1831 there was no fooling when Pennsylvania Governor George Wolf approved legislation that incorporated the borough of Minersville in the county of Schuylkill.

From its official inception as a borough in 1831 until present day the population of Minersville seems to have correlated with the output of the mining industry. As the anthracite industry reigned as king, the population steadily grew. When Minersville celebrated their centennial in 1931 it boasted a population of over 9,000 individuals. Minersville was once home to a large garment factory which employed several hundred individuals, mostly women. Today, although the town's population has decreased, new industries have replaced the old. Manufacturing and retail business have taken the place of mining as the leading industry.

Source: <https://minersvillepa.gov/community/history/>

When did Daylight Savings Time Begin?

You've probably noticed that twice a year, most of the United States adjusts to time moving forward or moving back again. Benjamin Franklin gets some credit for the idea of daylight saving time, though his recommendation was a joke. In a letter to the editor of the "Journal of Paris," Franklin jokingly recommended the people get out of bed earlier in the morning to minimize the use of candles and lamp oil.

Daylight saving time was first used during World War I. In 1916, locations within the German Empire set clocks ahead one hour to use less power for lighting and to save fuel for the war effort. Other countries followed, but they all went back to standard time when the war ended. During WWII, President Franklin Roosevelt reestablished the idea of daylight saving time, called War Time in February 1942 and it lasted to the end of September 1945.

During the 1973 oil embargo, the United States Congress ordered a year-round period of daylight saving time to save energy. The period ran from Jan. 1974 to April 1975. In Oct. 1974, the U.S. switched back to standard time. From 1987 through 2006, daylight saving time started the first weekend in April, running through the last weekend in October. The Energy Policy Act of 2005 changed both the starting and ending dates. Beginning in 2007, Daylight Saving Time started on the second Sunday in March and ended on the first Sunday in November, which has been the case ever since.

Not all places in the U.S. observe Daylight Saving Time. Hawaii and most of Arizona observe standard time only. In recent years, some have pushed to make daylight saving time last year-round. "Time" will tell if we see year-round daylight saving time in the future.