SCIENCE

Eroding a virtue: AI trains people to expect instant answers, and that's bad news for patience

By Phys.org

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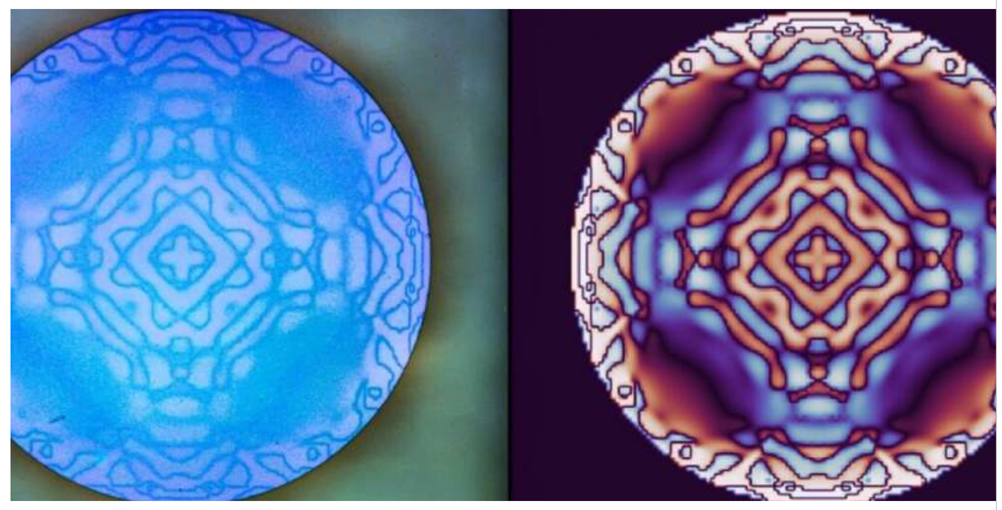
AI paired with tiny optical device corrects distorted light for sharper imaging

By Phys.org



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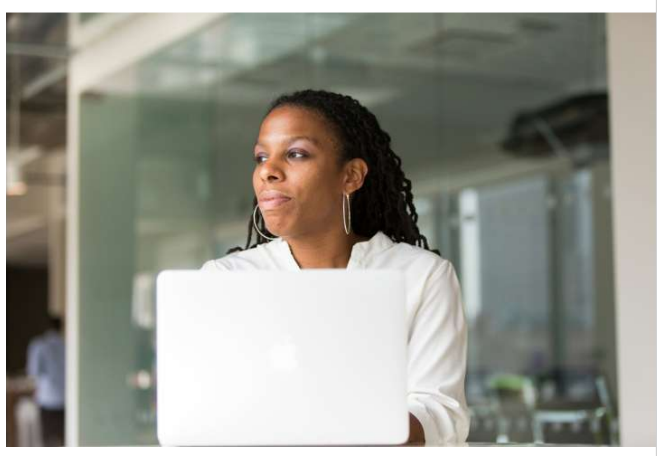
Blurry light from lens imperfections is a problem everywhere, from microscopes to telescopes to smartphone cameras. Using a tiny yet carefully engineered optical element and artificial intelligence, University of California San Diego engineers have built a way to spot and correct those distortions from a single image—a step that could make advanced optical systems faster, smaller and easier to use. Blurry light from lens imperfections is a problem everywhere, from microscopes to telescopes to smartphone cameras. Using a tiny yet carefully engineered optical element and artificial intelligence, University of California San Diego engineers have built a way to spot and correct those distortions from a single image—a step that could make advanced optical systems faster, smaller and easier to use. Blurry light from lens imperfections is a problem everywhere, from telescopes to smartphone cameras. Using a tiny yet carefully engineered optical element and artificial intelligence, University of California San Diego engineers have built a way to spot and correct those distortions from a single image—a step that could make advanced optical systems faster, smaller and easier to use. Blurry light from lens imperfections is a problem everywhere, from microscopes to telescopes to smartphone cameras. Using a tiny yet carefully engineered optical element and artificial intelligence, University of California San Diego engineers have built a way to spot and correct those distortions from a single image—a step that could make advanced optical systems faster, smaller and easier to use. Blurry light from lens imperfections is a problem everywhere, from microscopes to telescopes to smartphone cameras. Using a tiny yet carefully engineered artificial intelligence, University of California San Diego engineers have built a way to spot and correct those distortions from a single image—a step that could make advanced optical systems faster, smaller and easier to use. Blurry light from lens imperfections is a problem everywhere, from microscopes to telescopes to smartphone cameras. Using a tiny yet carefully engineered optical element and artificial intelligence, University of California San Diego engineers have built a way to spot and correct those distortions from a single image—a step that could make advanced optical systems faster, smaller and easier to use. Blurry light from lens imperfections is a problem everywhere, from microscopes to telescopes to smartphone cameras. Using a tiny yet carefully engineered optical element and artificial intelligence, University of California San Diego engineers have

New report finds sharply rising rates of unemployment for Black Californians

By Phys.org

Employment—a major marker and measure of quality of life—declined among Black Californians between 2024 and 2025, according to new research from the Black Policy Project, a research initiative of the UCLA Ralph J. Bunche Center for African American Studies. Employment—a major marker and measure of quality of life—declined among Black Californians between 2024 and 2025, according to new research from the Black Policy Project, a research initiative of the UCLA Ralph J. Bunche Center for African American Studies. Employment—a major marker and measure of quality of life—declined among Black Californians between 2024 and 2025, according to new research from the Black Policy Project, a research initiative of the UCLA Ralph J. Bunche Center for African American Studies. Employment—a major marker and measure of quality of life—declined among Black Californians between 2024 and 2025, according to new research from the Black Policy Project, a research initiative of the UCLA Ralph J. Bunche Center for African American Studies. Employment—a major marker and measure of quality of life—declined among Black Californi- from the Black Policy Project, a research initiative of the UCLA Ralph J. Bunche Center for African American Studies. Employment—a major marker and measure of quality of life—declined among Black Californians between 2024 and 2025, according to new research from the Black Policy Project, a research initiative of the UCLA Ralph J. Bunche Center for African American Studies. Employment—a major marker and measure of quality of life—declined among Black Californians between 2024 and 2025, according to new research from the Black Policy Project, a research initiative of the UCLA Ralph J. Bunche Center for African American Studies. Employment—a major marker and measure of quality of life—declined among Black Californians between 2024 and 2025, according to new research from the Black Policy Project, a research initiative of the UCLA Ralph J. Bunche Center for African American Studies. Employment—a major marker and measure of quality of life—declined among Black Californians between 2024 and 2025, according to new research from the Black Policy Project, a research initiative of the UCLA Ralph J. Bunche Center for African American Studies. Em-



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Newfound velociraptor cousin probably glided on four 'wings' and hunted early birds

By Phys.org

A fossil bed in northwestern China is littered with the remains of hundreds of prehistoric birds—including some whose broken bones were crushed into pellets, similar to those

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What makes 15-minute cities work? More nearby jobs and connected streets

By Phys.org

The concept of the "15-Minute City" has gained global traction as a blueprint for more livable, sustainable communities by placing daily essentials—such as grocery stores, schools, restaurants and parks—within easy reach of residents. The idea envisions neighborhoods where people can meet most of their daily needs within a 15-minute walk, bike ride or transit trip from home, reducing automobile dependence while improving quality of life.

Rare wild goats in Northumberland prove to be a genetically distinct breed

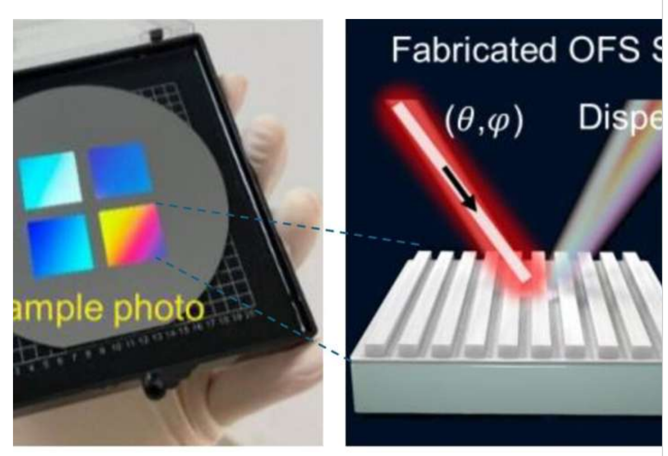
By Phys.org

New research shows Cheviot goats are one of the UK's most genetically distinct goat populations. Led by Newcastle University, this is the first genetic study to determine the ancestry and genetic health of a UK feral goat population. It provides a genetic assessment of the Cheviot goats in Northumberland's College Valley, identifying them as a historically significant and genetically distinct population unlike the other European goat breeds.

Teaching AI to design optical surfaces using real-world imperfections

By Phys.org

Designing surfaces that precisely control how light behaves at the nanoscale is tricky. Optical Fourier surfaces, which are nanostructured gratings that redistribute light into specific directions and wavelengths, hold enormous potential for compact spectrometers, augmented-reality displays, and advanced sensors. However, their standard design process relies on computer simulations that assume idealized conditions such as single-angle illumination and the absence of fabrication imperfections—a far cry from reality. Designing surfaces that precisely control how light behaves at the nanoscale is tricky. Optical Fourier surfaces, which are nanostructured gratings that redistribute light into specific directions and wavelengths, hold enormous potential for compact spectrometers, augmented-reality displays, and advanced sensors. However, their standard design process relies on computer simulations that assume idealized conditions surfaces that precisely control how light behaves at the nanoscale is tricky. Optical Fourier surfaces, which are nanostructured gratings that redistribute light into specific directions and wavelengths, hold enormous potential for compact spectrometers, augmented-reality displays, and advanced sensors. However, their standard design process relies on computer simulations that assume idealized conditions such as single-angle illumination and the absence of fabrication imperfections—a far cry from reality. Designing surfaces that precisely control how light behaves at the nanoscale is tricky. Optical Fourier surfaces, which are nanostructured gratings that redistribute light into specific directions and wavelengths, hold enormous potential for compact spectrometers, augmented-reality displays, and advanced sensors. However, their standard design process relies on computer simulations that assume idealized conditions such as single-angle illumination and the absence of fabrication imperfections—a far cry which are nanostructured gratings that redistribute light into specific directions and wavelengths, hold enormous potential for compact spectrometers, augmented-reality displays, and advanced sensors. However, their standard design process relies on computer simulations that assume idealized conditions such as single-angle illumination and the absence of fabrication imperfections—a far cry from reality. Designing surfaces that precisely control how light behaves at the nanoscale is tricky. Optical Fourier surfaces, which are nanostructured gratings that redistribute light into specific directions and wavelengths, hold enormous potential for compact spectrometers, augmented-reality displays, and advanced sensors. However, their standard design process relies on computer simulations that assume idealized conditions such as single-angle illumination and the absence of fabrication imperfections—a far cry from reality. Designing surfaces that precisely control how light behaves at the nanoscale is enormous potential for compact spectrometers, augmented-reality displays, and advanced sensors. However, their standard design process relies on computer simulations that assume idealized conditions such as single-angle illumination and the absence of fabrication imperfections—a far cry from reality. Designing surfaces that precisely control how light behaves at the nanoscale is tricky. Optical Fourier surfaces, which are nanostructured gratings that redistribute light into specific directions and wavelengths, hold enormous potential for compact spectrometers, augmented-reality displays, and advanced sensors. However, their standard design process relies on computer simulations that assume idealized conditions such as single-angle illumination and the absence of fabrication imperfections—a far cry from reality. Designing surfaces that precisely control how light behaves at the nanoscale is tricky. Optical Fourier surfaces, which are nanostructured gratings that redistribute light into



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