Apple debuts iPhone 16 Pro and iPhone 16 Pro Max

Powered by the A18 Pro chip and built for Apple Intelligence, the Pro lineup introduces larger display sizes, Camera Control, innovative pro camera features, and a huge leap in battery life.

CUPERTINO, CALIFORNIA Apple today introduced iPhone 16 Pro and iPhone 16 Pro Max, featuring Apple Intelligence, larger display sizes, new creative capabilities with innovative pro camera features, stunning graphics for immersive gaming, and more —all powered by the A18 Pro chip. With Apple Intelligence, powerful Apple-built generative models come to iPhone in the easy-to-use personal intelligence system that understands personal context to deliver intelligence that is helpful and relevant while protecting user privacy. Camera Control unlocks a fast, intuitive way to tap into visual intelligence and easily interact with the advanced camera system. Featuring a new 48MP Fusion camera with a faster quad-pixel sensor that enables 4K120 fps video recording in Dolby Vision, these new Pro models achieve the highest resolution and frame-rate combination ever available on iPhone. Additional advancements include a new 48MP Ultra Wide camera for higher-resolution photography, including macro; a 5x Telephoto camera on both Pro models; and studio-quality mics to record more true-to-life audio. The durable titanium design is strong yet lightweight, with larger display sizes, the thinnest borders on any Apple product, and a huge leap in battery life —with iPhone 16 Pro Max offering the best battery life on iPhone ever.

iPhone 16 Pro and iPhone 16 Pro Max will be available in four stunning finishes: black titanium, natural titanium, white titanium, and desert titanium. Pre-orders begin Friday, September 13, with availability beginning Friday, September 20.

"Powered by the faster, more efficient A18 Pro chip and built for Apple Intelligence, iPhone 16 Pro and iPhone 16 Pro Max are the most advanced iPhone models we've ever made,"said Greg Joswiak, Apple's senior vice president of Worldwide Marketing. "Customers who are looking for the best possible iPhone will be able to take advantage of this huge step forward, whether they're applying edits to a photo without lifting a finger, rewriting meeting notes for a more professional tone, or using the advanced camera system to capture their next masterpiece in 4K120 fps in Dolby Vision —all while enjoying extraordinary battery life."

Built for Apple Intelligence

Apple Intelligence on the iPhone 16 lineup harnesses the power of Apple silicon and Apple-built generative models to understand and create language and images, take action across apps, and draw from personal context to simplify and accelerate everyday tasks. Apple Intelligence maintains the privacy and security of user data with Private Cloud Compute. This groundbreaking approach provides the ability to flex and scale computational capacity between on-device processing and larger, server-based models that run on dedicated Apple silicon servers —an extraordinary step forward for privacy in artificial intelligence. Apple Intelligence will be available as a free software update, with the first set of features rolling out next month in U.S. English for most regions around the world.

With systemwide Writing Tools, users can adjust notes or emails to be more friendly, more concise, or add a more professional tone to their writing; check for grammar, word choice, and sentence structure; and summarize selected text to make it more digestible. In the Notes and Phone apps, users can also record, transcribe, and summarize audio. When a recording is initiated while on a call in the Phone app, participants are automatically notified, and once the call ends, Apple Intelligence generates a summary to recall key points.

With systemwide Writing Tools, available with the first set of Apple Intelligence features, users can rewrite, proofread, and summarize text nearly everywhere they write.

Apple Intelligence helps users prioritize with summarized notifications, along with Priority Messages in Mail, a feature that understands the content of emails and surfaces time-sensitive messages. Across a user's inbox, summaries convey the most important information of each email instead of previewing the first few lines.

Siri becomes more deeply integrated into the system experience and gets a brand-new design with an elegant glowing light that wraps around the edge of the screen when active. With richer language-understanding

Figure 1: An up-close look at iPhone 16 Pro Max and iPhone 16 Pro.

Figure 2: iPhone 16 Pro and iPhone 16 Pro Max will be available in four stunning finishes: black titanium, natural titanium, white titanium, and desert titanium. Pre-orders begin Friday, September 13, with availability beginning Friday, September 20.
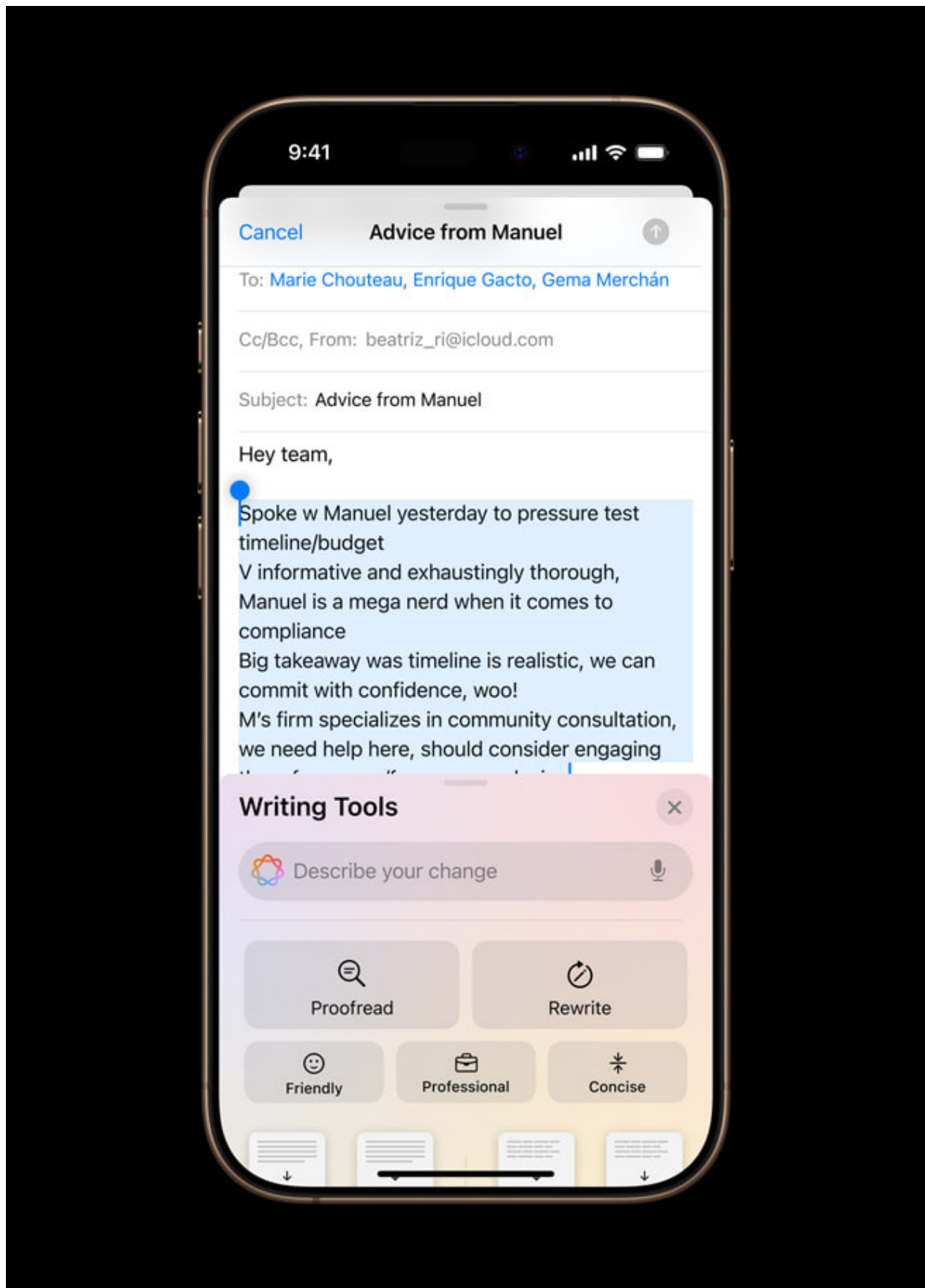
Figure 3: On iPhone 16 Pro, a user's original email copy is shown being entered before the user asks Apple Intelligence-powered writing tools to make the copy more professional.
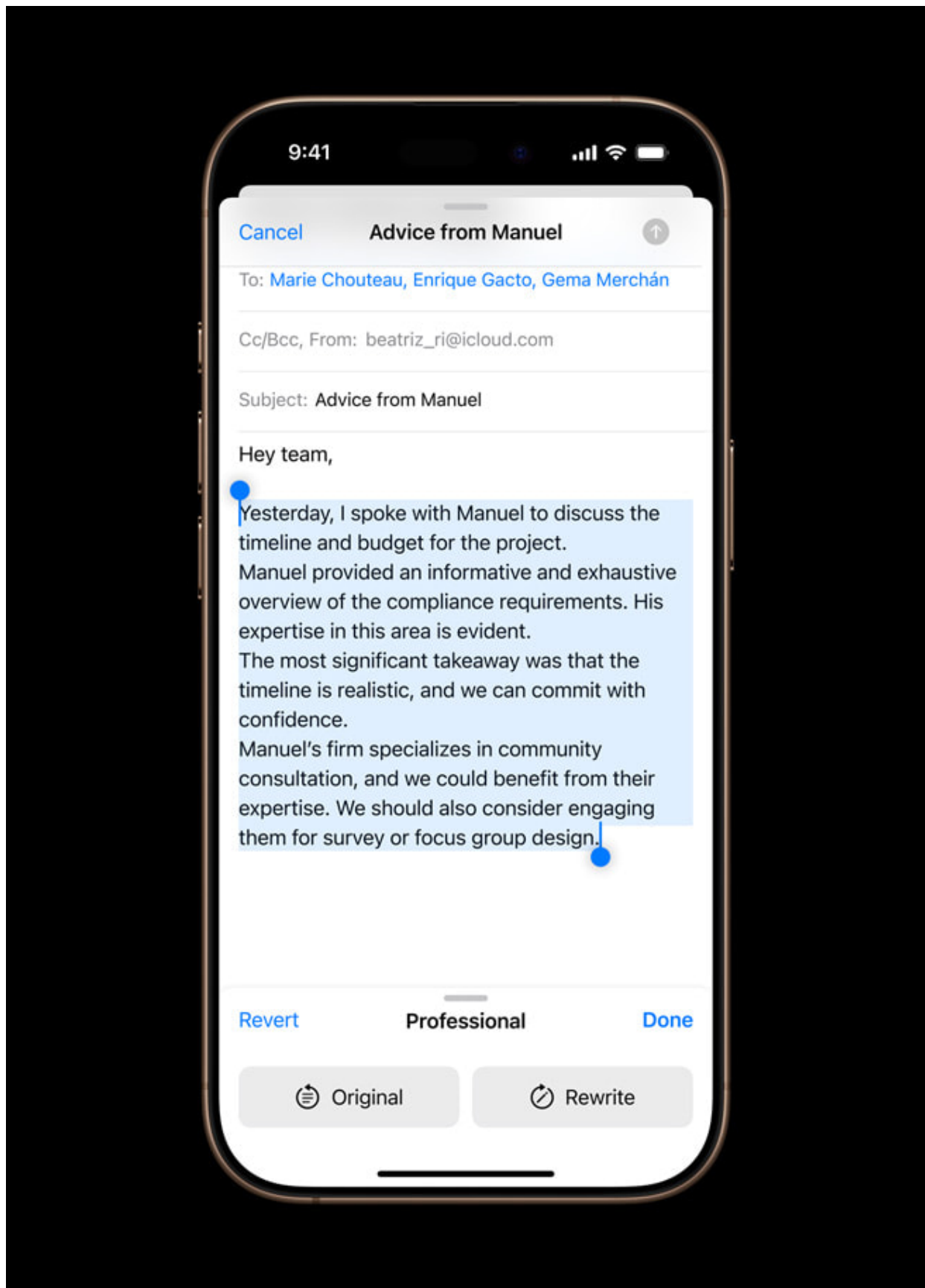
Figure 4: iPhone 16 Pro displays the more professional version of the user's original email copy created with Apple Intelligence.

capabilities, communicating with Siri is more natural and flexible. Siri follows along when users stumble over their words, and maintains context from one request to the next. Users can type to Siri at any time, and switch fluidly between text and voice as they accelerate everyday tasks. Siri also now has extensive product knowledge to answer thousands of questions about features on iPhone and other Apple devices.

Additional Apple Intelligence features will roll out later this year and in the months following, including Image Playground, which allows users to create playful images in moments. Emoji will be taken to an entirely new level with the ability to create original Genmoji by simply typing a description, or by selecting a photo of a friend or family member. Siri will be able to draw on a user's personal context to deliver intelligence that is tailored to them. It will also gain onscreen awareness to understand and take action with users'content, as well as take hundreds of new actions in and across Apple and third-party apps. And while using iOS 18 features like Siri and Writing Tools, users will be able to easily access ChatGPT from OpenAI.

Users will be able to create an original Genmoji by simply typing a description, taking emoji to an entirely new level.

Siri will be able to tap into a user's on-device personal context to help them in ways that are unique to them, like locating details for an upcoming flight or keeping track of a dinner reservation.

Siri will be able to deliver intelligence that's tailored to the user and their on-device information, like locating details in a user's email.

An Incredibly Light and Durable Design with Larger Displays

The new Pro lineup features the thinnest borders of any Apple product and introduces larger display sizes: 6.3 inches on iPhone 16 Pro and 6.9 inches on iPhone 16 Pro Max —the largest iPhone display ever.[1] The stunning Super Retina XDR displays with Always-On and ProMotion technologies help users accomplish more. Both models offer industry-leading durability with a strong, lightweight titanium design, as well as the latest-generation Ceramic Shield, which has an advanced formulation that is 2x tougher than glass on any other smartphone. The new mechanical architecture improves heat dissipation and efficiency for up to 20 percent better sustained performance. Along with the new internal design and advanced power management of iOS 18, larger batteries are optimized to offer a huge leap in battery life.

Introducing Camera Control

Camera Control —a result of thoughtful hardware and software integration —makes the pro camera system more versatile with an innovative new way to quickly launch the camera, take a photo, and start video recording. It has a tactile switch that powers the click experience, a high-precision force sensor that enables the light press gesture, and a capacitive sensor that allows for touch interactions. A new camera preview helps users frame the shot and adjust other control options —such as zoom, exposure, or depth of field —to compose a stunning photo or video by sliding their finger on the Camera Control. Later this fall, Camera Control will be updated with a two-stage shutter to automatically lock focus and exposure on a subject with a light press, letting users reframe the shot without losing focus. Additionally, developers will be able to bring Camera Control to third-party apps such as Kino, which will offer users the ability to adjust white balance and set focus points, including at various levels of depth in their scene.

Later this year, Camera Control will unlock visual intelligence to help users learn about objects and places faster than ever before. Users can click and hold Camera Control to pull up the hours or ratings for a restaurant they pass, add an event from a flyer to their calendar, quickly identify a dog by breed, and more. Camera Control will also serve as a gateway into third-party tools with specific domain expertise, like when users want to search on Google to find where they can buy an item, or to benefit from ChatGPT' s problem-solving skills. Users are in control of when third-party tools are used and what information is shared.

Camera Control will enable visual intelligence to help users learn about objects and places around them faster than ever before. Camera Control will also be a gateway to third-party tools with specific domain expertise, like ChatGPT (shown) and Google search.
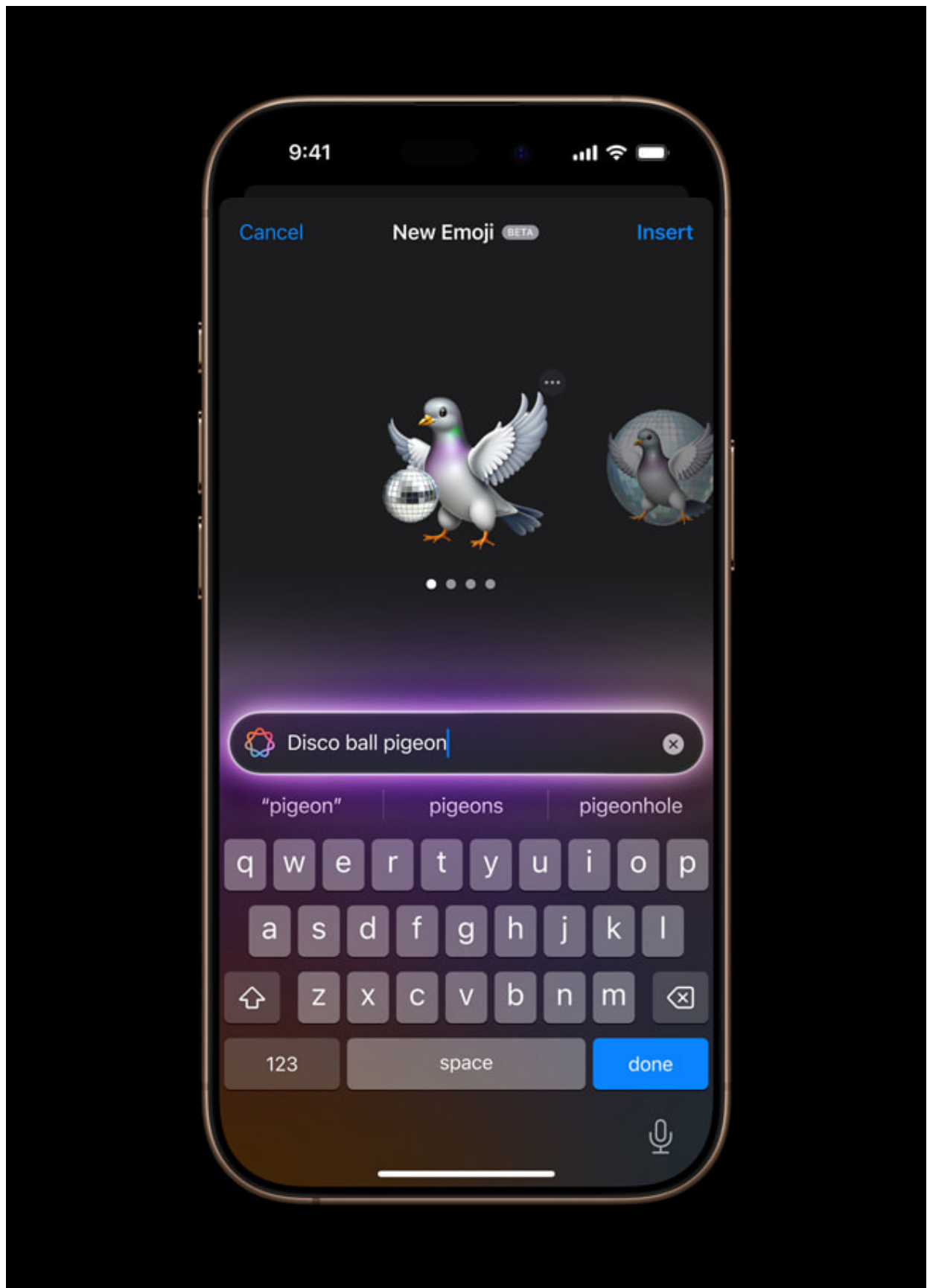
Figure 5: A user generates a unique Genmoji of a disco pigeon on iPhone 16 Pro.

Figure 6: Siri shows a user's mom's flight details on iPhone 16 Pro.

Figure 7: Siri displays an email from a user's friend about tile costs on iPhone 16 Pro.
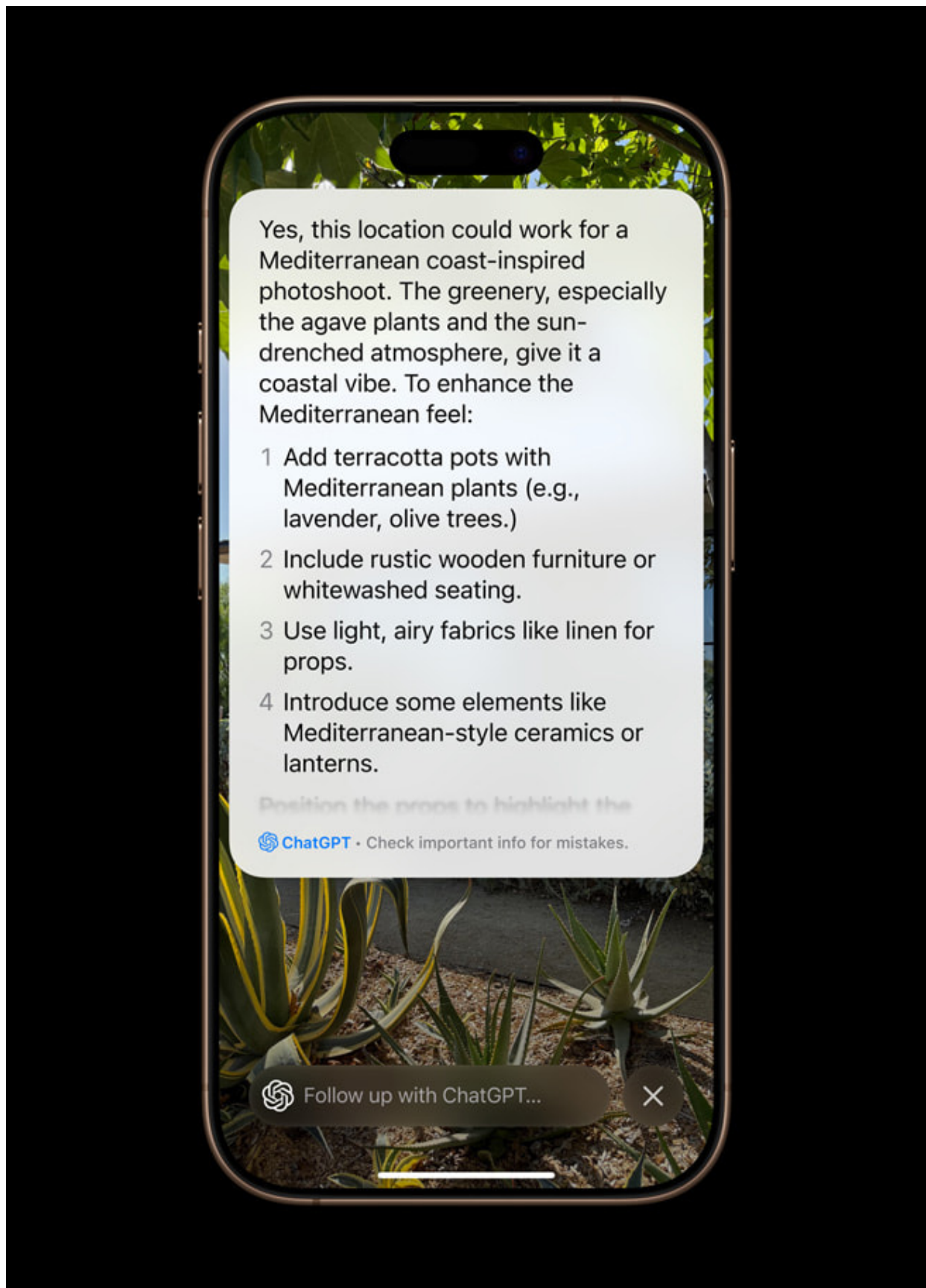
Figure 8: Visual intelligence is demonstrated on iPhone 16 Pro.

New Pro Creativity Across Photo, Video, and Audio

With iPhone 16 Pro and iPhone 16 Pro Max, the world's favorite camera gets even more powerful. Powered by A18 Pro, the upgraded camera system introduces a new 48MP Fusion camera with a faster, more efficient quad-pixel sensor and Apple Camera Interface, unlocking 4K120 fps video recording in Dolby Vision —the highest resolution and frame-rate combination ever available on iPhone, and a smartphone first. The quad-pixel sensor can read data 2x faster, enabling zero shutter lag for 48MP ProRAW or HEIF photos. A new 48MP Ultra Wide camera also features a quad-pixel sensor with autofocus, so users can take higher-resolution 48MP ProRAW and HEIF images when capturing uniquely framed, wider-angle shots or getting close to their subjects with macro photography. The powerful 5x Telephoto camera now comes on both iPhone 16 Pro and iPhone 16 Pro Max, allowing users to catch the action from farther away, no matter which model they choose. iPhone 16 Pro and iPhone 16 Pro Max now take spatial photos in addition to videos to help users relive memories with remarkable depth on Apple Vision Pro.

Figure 9: A close-up of the cameras on the back of iPhone 16 Pro.

iPhone 16 Pro and iPhone 16 Pro Max feature a 48MP Fusion camera, a 48MP Ultra Wide camera, and the 5x Telephoto camera, now available on both models.

Users can capture 4K120 fps in Slo-mo or Video mode, and adjust the playback speed after capture in the Photos app, including a quarter-speed playback, a new half-speed option for a dreamy effect, and a fifth-speed option that corresponds to 24 fps. When coupled with the new image signal processor (ISP) of A18 Pro, users can do frame-by-frame cinema-quality color grading for 4K120 fps in Dolby Vision. Users can also capture 4K120 fps ProRes and Log directly to an external storage device for efficient pro workflows.

Both Pro models feature four new studio-quality mics that preserve true-to-life recorded sounds, and video can now be captured in Spatial Audio for immersive listening with AirPods, Apple Vision Pro, or a surround sound system. The iPhone 16 Pro lineup also introduces creative new ways to edit video sound with Audio Mix —allowing users to adjust their sound after capture to focus on the voice of the person on camera,

make it sound like the video was recorded inside a professional studio, or position vocal tracks in the front and environmental noises in surround sound. With wind noise reduction, powerful machine learning (ML) algorithms reduce unwanted noise for better audio quality.

Next-generation Photographic Styles help users express their creativity and customize their photos by locally adjusting color, highlights, and shadows in real time. Styles also have a deeper understanding of skin undertones, so users can personalize how they appear in photos. Unlike filters, which often use a one-size-fits-all approach by adding a color to an entire scene, adjustments are applied to specific colors of a selected style. A wider set of styles offers more creative options for editing a photo's aesthetic, and styles can be further personalized with an easy-to-use new control pad and intensity slider for simultaneous adjustments across tone and color. These adjustments can be rendered during live preview, applied after a photo is taken, or even reversed later.

Figure 10: A person holds a pink orchid branch in an image shot on iPhone 16 Pro.

The powerful camera system on iPhone 16 Pro and iPhone 16 Pro Max captures stunning photos and videos.

A new 48MP Ultra Wide camera with autofocus has a new quad-pixel sensor for high-resolution macro photography.

The new 48MP Fusion camera has a second-generation quad-pixel sensor that can read data 2x faster, enabling zero shutter lag for 48MP ProRAW and HEIF photos.

The 48MP Ultra Wide camera allows users to capture stunning details when taking wider-angle shots.

Next-generation Photographic Styles provide different moods, including a Dramatic B&W option that looks

Figure 11: A photo of a purple flower, shot on iPhone 16 Pro.

Figure 12: A person in colorful makeup and draped in shadows poses in an image shot on iPhone 16 Pro.

Figure 13: Against a backdrop of tall mountains in the distance, a person walks through a field of tall grass in a photo shot on iPhone 16 Pro.

Figure 14: In a black-and-white photo shot on iPhone 16 Pro, a person poses in an indoor section.

great in the studio or with outdoor photography.

Figure 15: A detailed close-up of a bird, shot on iPhone 16 Pro.

With zero shutter lag for 48MP ProRAW and HEIF photos, users can capture the exact moment on the 48MP Fusion camera without compromising details.

Apple Intelligence takes the pro camera system to a new level. Coming later, Siri will be able to complete in-app requests and take action across apps, like pulling up a specific shot from a user's Photos library and then applying an edit to the image in Darkroom. Siri can also help users fully utilize the wide range of photo and editing capabilities, such as asking how to adjust the blur in the background of a photo.

Siri's new action capabilities will allow photographers to ask Siri to pull up a specific shot from their Photos library and then apply an edit to the image in Darkroom.

Industry-Leading Performance and Power Efficiency

The new A18 Pro chip is designed with industry-leading compute power to propel Apple Intelligence, ushering in a new era of pro performance. Built with second-generation 3-nanometer technology and featuring a new architecture with smaller, faster transistors, A18 Pro delivers unprecedented efficiency. The new 16-core Neural Engine is faster and more efficient than the previous generation, powering remarkable on-device performance for Apple Intelligence. A 17 percent increase in total system memory bandwidth —the highest ever in iPhone —enables faster experiences when using Writing Tools and Image Playground, and helps deliver astounding graphics. The bandwidth increase also benefits the 6-core GPU, which is up to 20 percent faster than the previous generation, driving graphics rendering for Apple Intelligence and stunning visuals
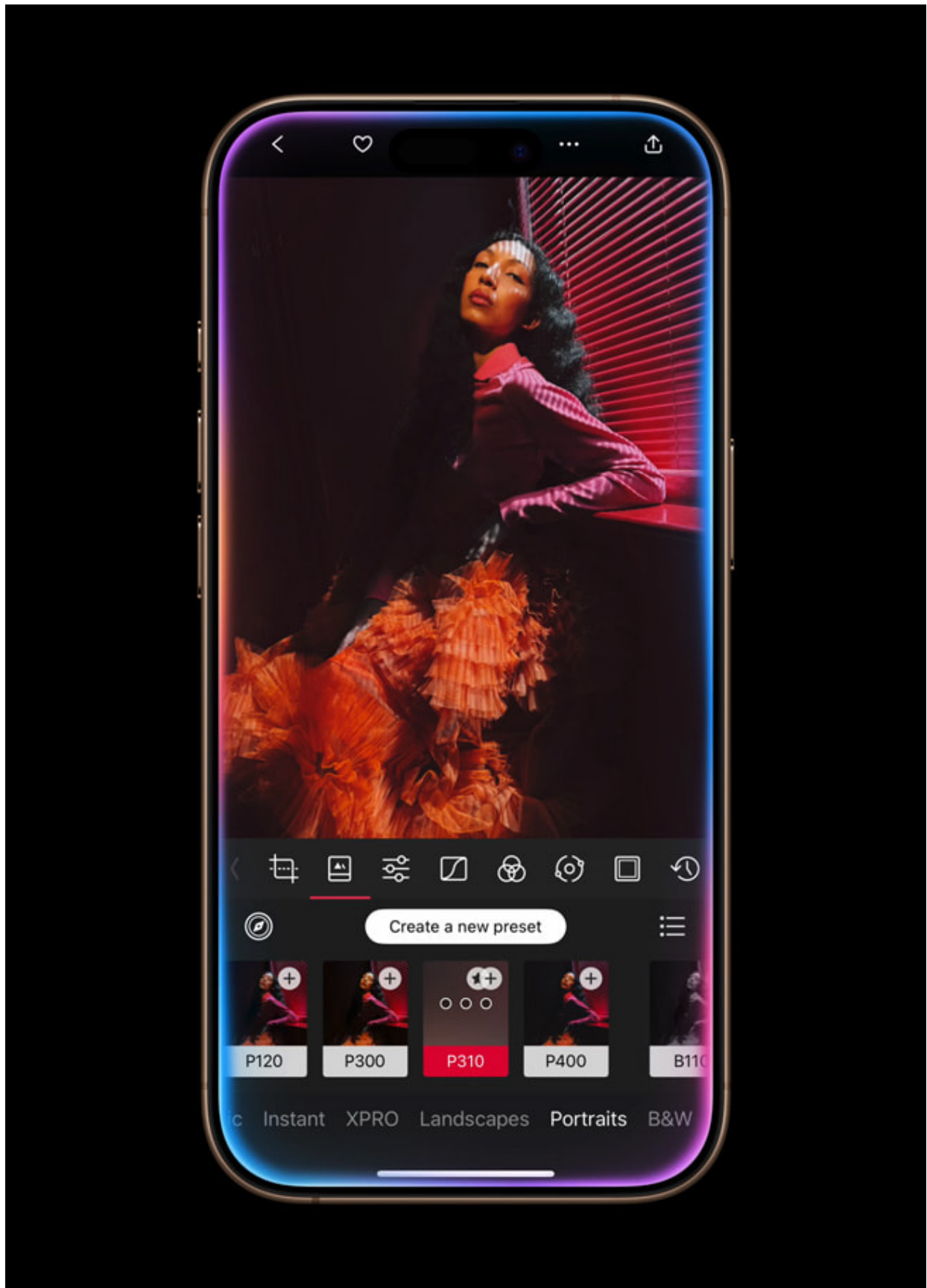
Figure 16: In a user's Photos library on iPhone 16 Pro, Siri pulls up a specific shot.

for gaming. Hardware-accelerated ray tracing gets up to 2x faster for even more realistic light sources and reflections, and Game Mode in iOS 18 unlocks more consistent frame rates while making AirPods, game controllers, and other wireless accessories incredibly responsive. A new 6-core CPU is the fastest in a smartphone, with two performance cores and four efficiency cores that can run the same workload as the previous generation 15 percent faster while using 20 percent less power. Next-generation ML accelerators are optimized for Apple Intelligence, and save power by handling high-efficiency, high-throughput, and low-latency computations on the CPU without engaging the Neural Engine.

A18 Pro enables Always-On and ProMotion technologies for an exceptional viewing experience on iPhone, as well as faster USB 3 speeds and ProRes video recording. A new ISP and video encoder process 2x the amount of data for faster video encoding and pro workflows.

Expanded Safety and Communication Capabilities

The iPhone 16 Pro lineup features innovative ways to stay connected and provides enhanced safety capabilities for peace of mind. Powered by the same groundbreaking technology as Emergency SOS via satellite, users are able to connect to the nearest satellite to send and receive texts, emoji, and Tapbacks over iMessage and SMS while outside cellular and Wi-Fi coverage.[2] Messages via satellite in iOS 18 are end-to-end encrypted. Also new with iOS 18, Emergency SOS Live Video allows users to share a live video feed or photos with participating emergency dispatchers during an emergency call.[3] Later this fall, Roadside Assistance via satellite —which connects users to a roadside assistance provider if they have car trouble while off the grid —expands beyond the U.S. to the U.K.

Better for the Environment

iPhone 16 Pro and iPhone 16 Pro Max are designed with the environment in mind. As part of Apple 2030, the company's ambitious goal to be carbon neutral across its entire carbon footprint by the end of this decade, Apple is prioritizing renewable electricity in manufacturing, and investing in wind and solar projects around the world to address the electricity used to charge all Apple products, including the iPhone 16 lineup. Today, all Apple facilities run on 100 percent renewable electricity —including the data centers that power Apple Intelligence.

To achieve Apple 2030, the company is also designing products with recycled and renewable materials. iPhone 16 Pro and iPhone 16 Pro Max feature more than 25 percent recycled content overall, including 100 percent recycled aluminum in the internal structural frame and 80 percent or more recycled steel across multiple components. The battery is made with 100 percent recycled cobalt and —in a first for iPhone —over 95 percent recycled lithium. The iPhone 16 Pro lineup also meets Apple's high standards for energy efficiency, and is free of mercury and PVC. The packaging is entirely fiber-based, bringing Apple closer to its goal of removing plastic from its packaging by next year.

Pricing and Availability

- iPhone 16 Pro and iPhone 16 Pro Max will be available in black titanium, natural titanium, white titanium, and desert titanium, in 128GB, 256GB, 512GB, and 1TB storage capacities. iPhone 16 Pro starts at **$999** (U.S.) or **$41.62** (U.S.) per month, and iPhone 16 Pro Max starts at **$1,199** (U.S.) or **$49.95** (U.S.) per month.
- Apple offers great ways to save and upgrade to the latest iPhone. Customers can get **$180**(U.S.) to **$650**(U.S.) in credit when they trade in iPhone 12 or higher, or up to **$1,000** (U.S.) in credits to put toward an iPhone 16 Pro with a carrier offer. Customers can take advantage of these offers by visiting the Apple Store online or an Apple Store location. For carrier offer eligibility requirements and more details, see apple.com/shop/buy-iphone/carrier-offers. To see what their device is worth and for trade-in terms and conditions, customers can visit apple.com/shop/trade-in.
- Customers in more than 58 countries and regions, including *Australia*, *Canada*, *China*, *France*, *Germany*, *India*, *Japan*, *Malaysia*, *Mexico*, *South Korea*, *Türkiye,* the *UAE*, the *U.K.*, and the *U.S.*, will

be able to pre-order iPhone 16 Pro and iPhone 16 Pro Max beginning at 5 a.m. PDT this Friday, September 13, with availability beginning Friday, September 20.

- iPhone 16 Pro and iPhone 16 Pro Max will be available in *Macao*, *Vietnam*, and 19 other countries and regions beginning Friday, September 27.
- iOS 18 will be available as a free software update on Monday, September 16.
- Apple Intelligence will be available as a free software update. The first set of Apple Intelligence features will be available in beta next month as part of iOS 18.1, iPadOS 18.1, and macOS Sequoia 15.1, with more features rolling out in the months to come. It will be available on iPhone 16, iPhone 16 Plus, iPhone 16 Pro, iPhone 16 Pro Max, iPhone 15 Pro, iPhone 15 Pro Max, and iPad and Mac with M1 and later, with device and Siri language set to U.S. English. Later this year, Apple Intelligence will add support for localized English in *Australia*, *Canada*, *New Zealand*, *South Africa*, and the *U.K.* Over the course of the next year, Apple Intelligence will expand to more platforms and languages, like Chinese, English (India), English (Singapore), French, German, Italian, Japanese, Korean, Portuguese, Spanish, Vietnamese, and others.
- In addition to an iPhone 16 Pro and iPhone 16 Pro Max Clear Case, available for **$49**(U.S.), a Silicone Case with MagSafe will be available for **$49**(U.S.) in black, denim, fuchsia, lake green, plum, star fruit, stone gray, and ultramarine. Apple cases for the iPhone 16 lineup work seamlessly with Camera Control, featuring a sapphire crystal coupled to a conductive layer that communicates finger movements to the Camera Control. FineWoven Wallet with MagSafe will be available for **$59** (U.S.) in black, blackberry, dark green, and deep blue.
- A new MagSafe Charger enables faster wireless charging up to 25W, is Qi2 certified, and is available in a 1-meter length for **$39**(U.S.) or a 2-meter length for **$49** (U.S.).
- AppleCare+ for iPhone provides unparalleled service and support. This includes unlimited incidents of accidental damage, battery service coverage, and 24/7 support from the people who know iPhone best.
- iCloud+ plans start at 50GB for **$0.99** (U.S.) per month and offer up to 12TB for **$59.99** (U.S.) per month, providing additional storage to keep files, photos, videos, and more safe in the cloud, accessible across devices, and easy to share with others. iCloud+ also gives access to premium features, including Private Relay, Hide My Email, Custom Email Domains, and HomeKit Secure Video support.
- Customers who purchase iPhone 16 Pro and iPhone 16 Pro Max will receive three free months of Apple Music, Apple Arcade, and Apple Fitness+ with a new subscription.

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[1] The display has rounded corners that follow a beautiful curved design, and these corners are within a standard rectangle. When measured as a standard rectangular shape, the screen is 6.27 inches (iPhone 16 Pro) or 6.85 inches (iPhone 16 Pro Max) diagonally. Actual viewable area is less.

[2] Apple's satellite features are included for free for two years starting at the time of activation of a new iPhone 14 or later. For Emergency SOS via satellite availability, visit support.apple.com/en-us/HT213426. Messages via satellite will be available in the U.S. and Canada in iOS 18. SMS availability will depend on carrier. Carrier fees may apply. Users should check with their carrier for details. Roadside Assistance via satellite is currently available in the U.S. with AAA and Verizon Roadside Assistance, and is launching in the U.K. with Green Flag this fall. Participating roadside assistance providers may charge for services, and iPhone users who are not members can take advantage of their roadside assistance services on a pay-per-use basis. Apple's satellite services were designed for use in open spaces with a clear line of sight to the sky. Performance may be impacted by obstructions such as trees or surrounding buildings.

[3] Emergency SOS Live Video will be available in the U.S. in iOS 18.

All cobalt and lithium references are on a mass balance allocation.

128GB storage capacity is available on iPhone 16 Pro.