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Collaborative creative team
合作之創造團隊



Qiao Studio

SIXTH SENSE

■
Description 简介
The Era of Neuro-Spatial Computing
神经空间计算时代



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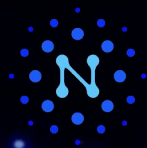


讓我們回顧過去，隨時間推進的技術成就



Let's look back at the past, technological achievements progress over time

2040

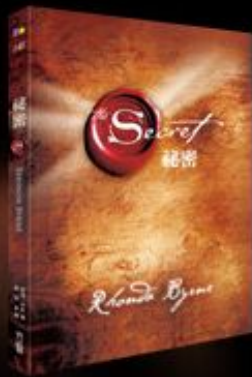


NeuroConnect

各位科技愛好者們大家好! 歡迎來到NeuroConnect科技發佈會, 這是一個關於我們最新產品與應用的重要發表日! 今天, 我們將這裡介紹一些跨時代的技術, 它將改變我們與世界互動的方式。

Ladies and gentlemen, ! Welcome to NeuroConnect, for this very special day of announcements about our latest technology and platform. Today, we're here to introduce something extraordinary that will change the way we interact with technology and data.





《The Secret 秘密》

有一本非常著名的書《秘密》，它探討了吸引力法則。吸引力法則教導我們，當我們擁有強烈的願望並充滿信心時，宇宙會回應我們的心念。起心動念是實現夢想的起點，而心想事成的關鍵在於保持積極的思考和行動。

I remember reading the renowned book "The Secret," which explores the Law of Attraction. According to this concept, when we possess strong desires and unwavering faith, the universe responds to our thoughts. Aspiration serves as the initial step in achieving our dreams, and the crucial factor in making them a reality lies in maintaining a positive mindset and taking action.

Imagine That 想象一下

我們能運用吸引力法則，讓心念引領未來智能應用程式的創新與進步，讓科技無縫融入我們生活的世界，讓我們的生活變得更豐富、更有意義，更精彩

a world where the Law of Attraction empowers our minds to pioneer the innovation and advancement of future smart applications, where technology seamlessly integrates into our lives, making our life richer and more meaningful.

- The possibilities are **boundless**
可能性是**无限的**



SIXTH SENSE



SIXTH SENSE

透過智慧隱形眼鏡和腦電波耳機將腦機介面 (BCI) 與擴增實境 (AR) 融合的技術。不再需要輕觸、手勢、滑動或說話等的輸入。而是運用吸引力法則, 通過想法和信念作為設備的主要輸入, 操控Sixth Sense的世界。

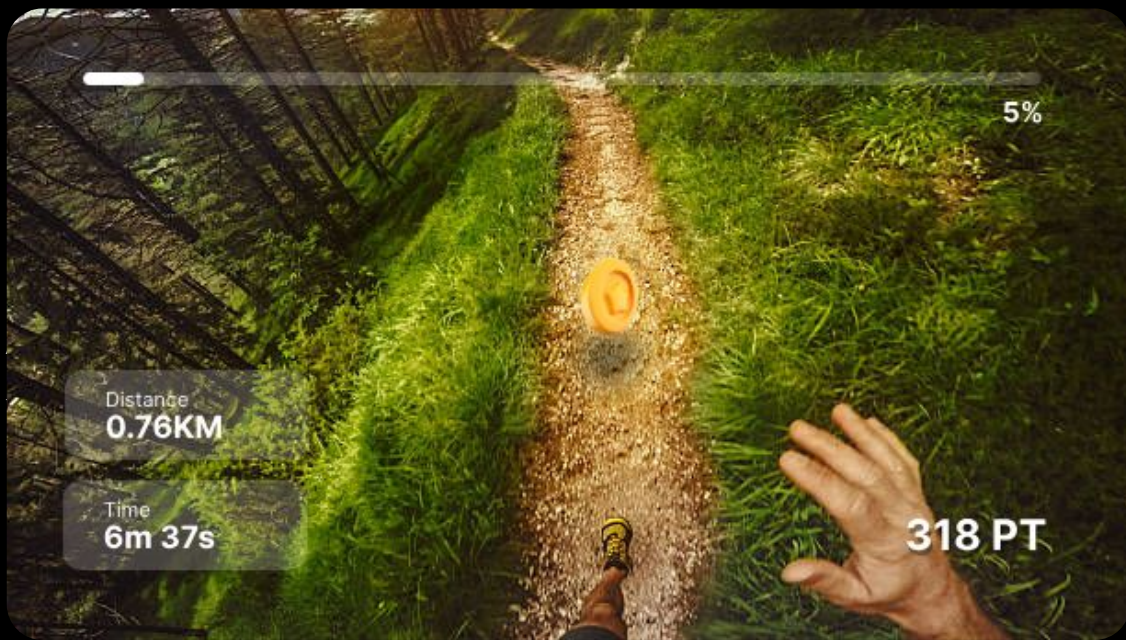
A technology that convergence of brain computer interfaces (BCI) with Augmented Reality (AR) through the smart contact lenses and brainwave headset. No longer about tapping, gesture , swiping, or speaking. It's about your thoughts becoming the interface. Imagine controlling your world with your mind.

這是馬克斯。他睡醒來並戴上他的Sixth Sense隱形眼鏡，他的世界瞬間就改變了。無需檢查手機，重要的工作通知，天氣預報和緊急新聞就會即時出現在他的視野中



— This is Max. He woke up, slips on his Sixth Sense contact lenses, and his world transforms. Important work notifications, weather forecasts and emergency news will appear instantly in his field of vision

他的早晨慢跑變成了一場有趣的探險，擴增實境的規劃引導她的晨跑路徑。



His morning jog becomes an adventure as augmented reality cues guide his path.

晚上, 在和莎拉享受晚餐的時候, 馬克斯只需輕鬆的通過思想操控, 便可以毫不費力地從菜單上點了自己喜歡的菜。在約會的過程Sixth Sense會建議有趣的談話主題, 同時實時分析大衛的情感和情緒, 為她們的互動提供有價值的建議。
馬克斯正在體驗一個因Sixth Sense的技術而變得更獨特更豐富的世界, 在這裡, 人的情感互動和技術創新, 無縫接軌。



At night, as he enjoyed their dinner with Sarah, his Sixth Sense technology worked its magic. Sixth Sense suggested engaging conversation topics, while in real-time, it analyzed Sarah's emotions and sentiments, providing valuable insights into their connection. Max were experiencing a world uniquely enriched by the power of Sixth Sense, where genuine connection and tech innovation coexisted seamlessly.



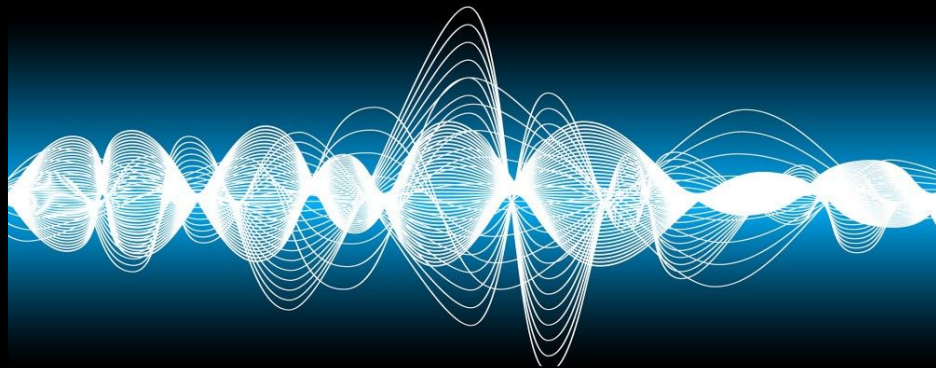
讓我們繼續深入探討 Sixth Sense 的真正非凡之處
——它的主要特點。



Now, let's delve into what makes Sixth Sense truly remarkable
——its key features.



Brainwave Signal as New Input 腦電波訊號作為新輸入



那些輕觸、手勢、滑動或說話輸入的日子已經過去了。有了我們的腦波耳機，您的思想意念成為新的界面。這是沉浸式和直觀體驗的典範

Gone are the days of taps, gesture and swipes. With our brainwave headset, your thoughts become the interface. It's the epitome of an immersive and intuitive experience.





Wireless Charging 無線充電

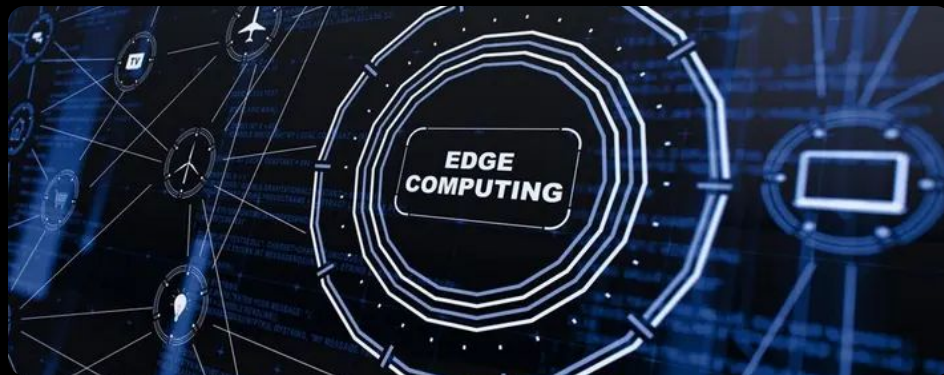


智能隱形眼鏡需要電力，我們已經通過無線充電解決了這一挑戰。告別電池焦慮

Smart Contact Lenses need power, and we've solved that challenge with wireless charging. Say goodbye to battery anxiety.



Computing Continuum 計算連續體



想像一下數據輕鬆從雲端流向您的智能隱形眼鏡，消除了數據處理的挑戰，提供了流暢的用戶體驗

Imagine data flowing effortlessly from the cloud to your Smart Contact Lenses, eliminating data processing challenges and providing a smooth user experience.





Minimalist Design 極簡和輕巧設計



我們設計Sixth Sense時考慮到了光滑和輕巧，提升了您的體驗，有別於傳統體積笨重的擴增實境設備。

Sixth Sense designed to be sleek and lightweight, enhancing your experience while setting it apart from bulkier AR devices.



Cybersecurity 網絡安全



Sixth Sense非常重視您的安全。我們用腦波輸入替換了傳統密碼，確保您的數據保持安全和受保護。

Sixth Sense takes your security seriously. We replace traditional passwords with brainwave input, ensuring your data remains safe and protected.



The Era of Neuro-Spatial Computing 神经空间计算时代

Sixth Sense不僅僅是創新，它代表了一個未來生活方式的重大改變，它標誌著智能手機時代的結束，迎來了神經空間計算時代的曙光。

Sixth Sense isn't just about innovation; it's about a seismic shift. It marks the end of the smartphone era and heralds the dawn of the age of neuro-spatial computing.



「起心動念



心想事成」

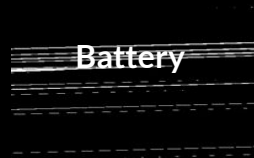
补充文件

Use cases



Sixth Sense is just a platform,
the possibilities are boundless

Main Challenge faced by AR devices in Future



—

which hampering the seamless experience.



Smart Contact Lenses

Receive input and send data to BCI headset through Li-Fi.

Present the output results received from the BCI headset.

Minimize the functionality of the Smart Contact Lenses

First layer of Edge Computing



BCI Headset

Receive image data from Smart Contact Lenses through Li-Fi

Receive brainwave input from brain.

Provide wireless charging to Smart Contact Lenses

Process and compile the data, then send to Cloud.

Minimalist and lightweight design

Second layer of Edge Computing



Cloud Computing

Receive compiled data from BCI headset.

The primary layer for image processing, brainwave input analysis, and output generation

Process the data, generate the output, then send it back to the BCI headset.



BCI



(Unicorn)



(Enobio)



(B-Alert)

OpenBCI



(Ultracortex "Mark IV")

Brain Product



(LiveAmp)

Compumedic Neuroscan



(Quik-Cap – SynAmps)

Emotiv



(EPOC)

InteraXon



(Muse Headband)

NeuroSky



(MindWave)

EEGsmart



(Touch)

Nihon Kohden



(Vital EEG)

Cognixion



(Cognixion ONE)



How to process these signals?

- + Challenging problem...

$$\hat{y}(t) = y(t) = \frac{1}{1 + \tau \frac{d}{dt}} x(t)$$

$$\hat{y}(t) = \frac{1}{\tau} \int_{-\infty}^t x(\tau) e^{-\frac{t-\tau}{\tau}} d\tau + y(0) e^{-\frac{t}{\tau}}$$

$$\hat{y} = W(A^{-1}N)^T x$$

- + Plus methods and models specific to the nature of brain dynamics



Smart Contact Lenses

