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Synchron Unveils Chiral™, the World's First Cognitive AI Brain Foundation Model

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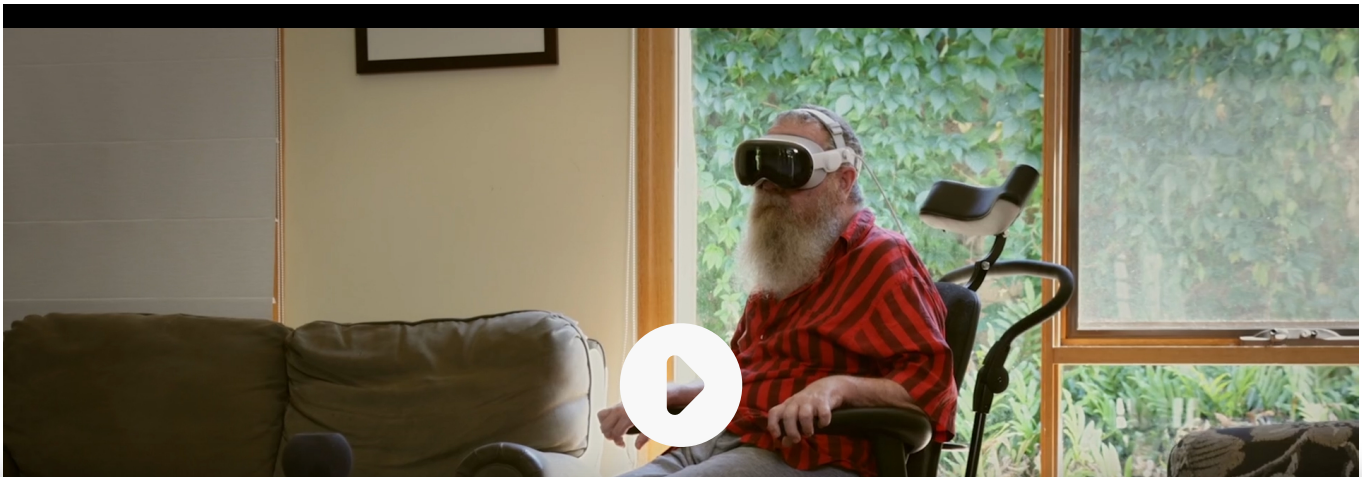

living with ALS, who despite losing the ability to use his hands, operated and controlled his digital home environment entirely hands-free, voice-free, and touch-free. Using direct thought-control, he adjusted lighting, played music, controlled temperature, and even activated appliances – made possible with the ability to navigate with your eyes and BCI-control of the AssistiveTouch features on Apple Vision Pro.

"We are building a brain foundation model using generative pre-training techniques that learn directly from neural data—abstracting human cognition at its source – to create features that improve our user's lives," said Tom Oxley, M.D., Ph.D., CEO & Founder, Synchron. "This is possible because of our ability to scale large datasets, by making BCI as common as a stent insertion."

The Roadmap to Cognitive AI

Synchron's collaboration with NVIDIA is centered around three major technological milestones on the roadmap towards Cognitive AI:

Motor Inference Powered by NVIDIA Holoscan – The first step is achieving real-time neural decoding with minimal latency. NVIDIA Holoscan enhances on-device edge computation, enabling faster, more precise motor inference in Synchron's BCI. This will allow users to seamlessly control digital environments through thought alone, laying the foundation for more advanced, high-dimensional interactions and AI-enablement.

Context-Aware Interaction with NVIDIA Cosmos – After achieving real-time neural decoding, the next step is integrating environmental awareness. The NVIDIA Omniverse platform and Cosmos world foundation models create physics-bound, photorealistic simulations of domestic environments, generating richly labeled datasets that enhance motor inference accuracy, adaptability, and fine-tuning. By interpreting neural signals in real-world simulations, the system will enable higher-dimensional inference, making interactions more predictive,

individuals with disabilities, enabling greater independence, communication, and connection with the world."

Synchron's collaboration with NVIDIA is laying the groundwork for the first large-scale foundation model of the brain. Just as AI today is trained on vast datasets of text and images, the next step in AI evolution is training on neural signals. Chiral™ will evolve into a self-learning model of cognition, representing the next leap beyond Generative AI and Agentic AI into the era of Cognitive AI.

Synchron remains focused on its users today. By restoring independence for people with paralysis, Synchron is demonstrating the life-changing potential of brain-computer interfaces while building the foundation for the next evolution of AI.

About Synchron

Synchron is the leading implantable brain-computer interface company, pioneering neurotechnology designed to restore and realize human capability. Since 2019, Synchron has completed two human clinical trials and is now preparing for a larger-scale clinical study to expand autonomy for patients with motor impairment. The BCI market represents a $400 billion opportunity (Morgan Stanley report), and Synchron is at the forefront - defining the category. Synchron recognizes the challenges of BCI adoption—autonomy, privacy, and discrimination—and are committed to ethical development, guided by the core principle of Cognitive Liberty, and safeguarding fundamental rights. Synchron is headquartered is in New York City. For more information, visit www.synchron.com and follow us @synchroninc.

Contacts

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SYNCHRON

RELEASE SUMMARY

Synchron Unveils Chiral™, the World's First Cognitive AI Brain Foundation Model

RELEASE VERSIONS

English

HASHTAGS

#BCI

#GTC25

#NVIDIA

#braincomputerinterface

#communication

#endovascular

#paralysis

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Synchron Expands Executive Team with Appointment of Andy Rasdal as Chief of Staff and Mark Brister as VP R&D

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Synchron Debuts First Thought-Controlled iPad Experience Using Apple's New BCI Human Interface Device Protocol

NEW YORK--(BUSINESS WIRE)--Synchron Debuts First Thought-Controlled iPad Experience Using Apple's New BCI Human Interface Device Protocol...

Synchron To Achieve First Native Brain-Computer Interface Integration with iPhone, iPad and Apple Vision Pro

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