

Shimmer launches 'Open Source Initiative for Healthcare Wearable Sensor Algorithms'

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Shimmer is actively recruiting additional sponsoring organizations for this initiative and will be asking its 3000+ research customers in more than 75 countries to contribute any software that they wish to make open source.



Shimmer Research, a global leader in wearable technology for research applications, on 12 Sep 2019, announced the launch of a healthcare industry open source initiative for wearable sensor algorithms. The initiative is being co-founded by Shimmer, Dr Vincent van Hees, author of the GGIR software and algorithms for movement sensor calibration, sensor wear detection, and signal aggregation, and Nextbridge Health, which is developing the Nextbridge Exchange, an online marketplace and discovery platform for the clinical research community.

Wearable sensors have the potential to revolutionize clinical trials and medicine in general by enabling continuous, real-world data to be included in clinical and post-marketing studies. They allow occasional and often subjective measures of health to be replaced with continuous, objective measures. But the lack of accepted clinical endpoints is proving to be a major impediment to the widespread adoption of wearable sensors in clinical trials.

This new initiative seeks to develop a curated set of open source algorithms and software tools for analyzing wearable sensor data that will be available to all medical device and pharmaceutical companies in a pre-competitive environment as a service to the industry. It will allow the work conducted by thousands of researchers during the past decade to be leveraged to create commonly-accepted de facto industry standards.

"We are excited to be working with Dr. Vincent van Hees and Nextbridge on this initiative. Vincent's GGIR platform sets the standard for open source algorithms in terms of usability, documentation, and validation. More than 80 peer-reviewed studies involving almost 200,000 participants have used GGIR. When we searched for algorithms to power our Verisense™ wearable sensor platform for clinical trials, nothing came close to GGIR," said Geoffrey Gill, president of Shimmer Americas.

“To make GGIR even more accessible, and expand the scope of algorithms covered to include all biometric sensors, requires significant infrastructure and ongoing effort. That’s where Nextbridge comes in. It is building an exchange for clinical research that is ideally suited to supporting this open source effort for the long term,” added Mr. Gill.

“It is great to be working with Nextbridge and Shimmer. Nextbridge will provide the support and infrastructure needed to take GGIR to the next level and dramatically expand the scope of its offerings,” said Dr. van Hees.

“Shimmer’s deep connections to the research community provides a fantastic channel to reach and recruit researchers to provide content,” said Richard Strobridge, CEO of Nextbridge Health.

Through this initiative, sponsors will gain access to transparent, peer-reviewed, and validated algorithms that have been commonly accepted by the industry. This advance should expedite clinical trials, reducing their cost, and improving patient access to treatments. Similarly, wearable sensor developers will gain access to accepted, validated algorithms, thus reducing duplication of efforts, and likely leading to quicker acceptance of new devices by the industry and regulatory agencies. Algorithm and software developers will receive increased visibility, greater recognition, and broader uses for their work, potentially resulting in business opportunities for them.

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