

BrainChip Acquires French Based Computer Vision Technology Company -- Spikenet Technology

ALISO VIEJO, CA -- (Marketwired) -- 06/30/16 -- BrainChip, Inc., a wholly owned subsidiary of BrainChip Holdings Ltd (ASX: BRN), a developer of a revolutionary new Spiking Neuron Adaptive Processor (SNAP) technology that has the ability to learn autonomously and associate information just like the human brain, has signed a binding term sheet to acquire Spikenet Technology ("Spikenet"), a revenue producing, Artificial Intelligence (AI) company that is a leader in computer vision technology based in France.

Highlights

- BrainChip to acquire 100% of Spikenet Technology for 10.7 million shares in BrainChip and EUR529,598
- Acquisition includes Spikenet's product library and related patent
- Acquisition will accelerate the initial sales of BrainChip's SNAP
- Establishes BrainChip as a revenue generator in the Computer Vision sector and provides dedicated sales and marketing presence in Europe
- BrainChip's SNAP to be integrated into Spikenet's core product to immediately enhance performance and capabilities -- faster than deep learning networks
- BrainChip to retain some of the best minds in AI and Computer Vision. Expands its technical team to 15 Neuromorphic experts in USA & Europe
- Spikenet customers are in Airport Security, Casino and Gaming and Steel Manufacturing sectors in Europe, North America and Asia-Pacific
- Computer Vision hardware and software market forecast to grow from \$6.6 billion in 2015 to \$48.6 billion annually by 2022 (ref. [Tractica](#))

Spikenet, based in Toulouse, France, is an "Artificial Vision Specialist" established in 1999 that has developed a disruptive pattern recognition technology called SNVision. SNVision has been successfully commercialized into a suite of software products that are currently being sold.

Spikenet customers include Bordeaux Airport, the French Interior Ministry, Shanghai Police, and numerous Las Vegas casinos.

The team at Spikenet is headed by Mr. Hung Do-Duy, who will continue in this role.

The Spikenet Core technology -- SNVision

SNVision is a software based spiking neural network that learns any visual pattern in real-time with no intensive training and very few image samples. It then detects and recognizes the learned patterns in still images and in video streams. SNVision and BrainChip's SNAP are extremely compatible and allow the combined group to target a wider audience with a suite of hardware and software products. The combined team has already identified several opportunities.

SNVision has been designed and formed into products that cater to the needs of several important sectors including:

Security

The technology is deliverable as an end-to-end solution where it is able to detect:

- Unauthorized movement in transport hubs such as airports and train stations,
- Detects loitering and sounds an alarm to a central control center, and
- 3D facial feature recognition.

The security product is configurable and has wide ranging uses. It can be deployed for example on mine sites, hotels and entertainment venues, banks and office buildings. It is currently in use with Spikenet customers worldwide.

A video demonstration can be seen here: <http://www.brainchipinc.com/applications/videos/video/1336/people-track-loitering>

Gaming

Spikenet gaming products are designed for use by casinos and gaming organizations, and are currently in use by a number of casinos in Las Vegas. The products are extremely precise with a recorded accuracy of 99.1%. The installed systems are capable of:

- Recording individual card table operations where they are used to identify cards,
- Recording table statistics,
- Counting currency, and
- Identifying player or dealer mistakes.

The market for this product is significant and worldwide. Spikenet gaming solutions are in commercial use in several gaming venues.

A video demonstration of the gaming product can be seen here: <http://www.brainchipinc.com/applications/videos/video/1334/game-card-reader>

Integration benefits

The acquisition and integration of Spikenet, its technology and its teams creates a dynamic and highly valuable business division inside BrainChip. Over the coming months the newly combined technical team will integrate SNAP into the Spikenet core product lines to significantly enhance its performance and capabilities. The newly formatted products will be a driving force behind a major sales and marketing campaign to existing and potential new customers in the computer vision sector.

The combined company has substantial geographical reach and is capable of selling, deploying and supporting Computer vision hardware and software solutions across all major geographical regions.

The combination of fast, autonomous learning hardware in BrainChip's SNAP technology and Spikenet's procedural capabilities creates a computer vision product that is compact and faster than deep learning networks. Deep Learning networks don't actually learn; they are trained on a supercomputer to perform a single task. Principal computer video processing systems compare pixels to identify a person or find an object, and suffer from processing speed issues.

The Computer Vision Sector

According to an industry research report by Tractica, the global market for computer vision hardware and software will increase from \$6.6 billion in 2015 to \$48.6 billion annually by 2022, at a compound annual growth rate (CAGR) of 32.9%.

The market intelligence firm anticipates that approximately three-quarters of the revenue opportunity during that period will derive from hardware, with the balance of the revenue coming from computer vision software and services.

The report states, "The computer vision market remains ripe for innovation and open to the emergence of new applications as well as new industry participants." For full report, please visit <https://goo.gl/h0lq4a>

Growth opportunities already identified across numerous business sectors

The acquisition of Spikenet will accelerate BrainChip's ongoing plan to deploy a range of complete products suitable for delivery into a wide range of business sectors.

BrainChip has identified the Unmanned Aerial Vehicle (UAV) market for an onboard vision based system and is currently engaged in the development of a drone based vision system that can detect and navigate to, from and around identifiable objects detected by such a system. The system once completed has numerous identified end users.

Other target markets for computer vision systems include:

- Robotics;
- Driver assistance and driverless vehicles;

- Airline onboard security systems; and
- Sports events and arena advertising, and many more.

Three Highly Regarded Experts to join the BrainChip Scientific Advisory Board (SAB)

As part of the acquisition BrainChip is delighted to announce that three highly regarded and published experts in the field of AI and Neuromorphic science will be invited to join the SAB. The BrainChip Scientific Advisory Board will comprise of six experts spanning a wide range of AI and Neuromorphic disciplines that will provide technical guidance when required. The strengthened team is extremely well connected to industry across North America, Europe and Asia and have demonstrated their talent and worth by not only providing technical opinion, but by providing introductions to numerous worldwide organizations who are potential customers or collaborators of BrainChip. The three new members are:

Dr. Simon Thorpe -- Director at Centre de Recherché Cerveau & Cognition
Google Scholar [Simon Thorpe](#)

Dr. Rufin Vanrullen -- Researcher at Centre de Recherché Cerveau & Cognition investigating the Neuronal Dynamics of Vision: Perception, Attention & Consciousness
Google Scholar [Rufin Vanrullen](#)

Dr. Arnaud Delorme -- Professor of neuroscience at UCSD
Google Scholar [Arnaud Delorme](#)

Sales and Marketing Team

Spikenet's highly talented technical and sales teams will be retained. The team has been in place for over 10 years and contains some of the best minds in Neural computing in Europe and the USA across various disciplines.

Conclusion

BrainChip's CEO, Peter van der Made, said: "We originally considered Spikenet as a technology partner and potential licensor of SNAP. Within a short period, we realized our deep synergies meant an acquisition would provide greater benefits to BrainChip's shareholders.

"We have been very impressed with Spikenet's management and innovative computer vision capabilities. Our technologies are a natural fit and SNAP, with its established rapid Autonomous Visual Feature Extraction capability, will give Spikenet's existing programs a turbo boost and make the product attractive to a wider audience."

Dr. Simon Thorpe, the founder and co-inventor of the Spikenet Technology, said: "I'm extremely pleased to see the two companies coming together via this acquisition. I believe BrainChip is the perfect combination for us. They've got the expertise and the industry contacts."

Spikenet's President, Hung Do-Duy, commented: "Joining forces with BrainChip will definitely help both companies' ambition to write a new and exciting story where in little time we can be the leaders in the space of Neurocomputing and the Artificial Intelligence."

BrainChip looks forward to providing shareholders with further updates regarding the acquisition and future plans for the Computer Vision division of the company.

About Spikenet

Spikenet, based in Toulouse, France, is an "Artificial Vision Specialist," using Spiking Neural Networks to create superior computer vision solutions.

Spikenet Technology provides tools and programs that are able to rapidly learn to recognize objects, people and anomalies. Spikenet's current products have been sold in the security, transport, media, industrial vision, and gaming sectors. For more information, please visit www.spikenet-technology.com.

About BrainChip Holdings Limited

BrainChip Inc., located in Aliso Viejo, CA, has developed a revolutionary new Spiking Neuron Adaptive Processor (SNAP) technology that is extremely fast, has the ability to learn autonomously and rapidly, and associate information just like the human brain. The technology is fast, completely digital, and consumes very low power. Additional information is available by visiting www.brainchipinc.com

Forward Looking Statements

This press release may contain certain forward-looking statements and information, as defined within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and is subject to the Safe Harbor created by those sections. This material contains statements about expected future events and/or financial results that are forward-looking in nature and subject to risks and uncertainties. Such forward-looking statements by definition involve risks, uncertainties and other factors, which may cause the actual results, performance or achievements of BrainChip Holdings Limited to be materially different from the statements made herein.

Image Available: <http://www.marketwire.com/library/MwGo/2016/6/30/11G104917/Images/TracticaGraph-41c075b59157a2048e4efd37610bbc02.jpg>

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