



## **Cogisen Launches Machine Learning Accelerator**

### **Allows companies to run machine learning in edge applications and integrate temporal data into use cases**

Rome, Italy, December 5th 2018 – Cogisen, the developer of artificial intelligence (AI) technologies, has today announced the launch of the Cogisen Machine Learning (ML) Accelerator, which enables applications to integrate temporal data and run use cases at the network edge without additional hardware requirements. Integrating temporal data, such as in video content, will be critically important for the accuracy of next generation use cases, including autonomous vehicles, while being able to operate at the network edge will be a catalyst for machine learning in sectors like the Internet of Things. The ML Accelerator, part of the Cognitive Artificial Intelligence Platform, delivers faster machine learning results in real-time by remapping data in the training phase into linear models rather than having to process multiple layers as convolutional neural networks do.

Cogisen bases the ML Accelerator on studies of the way the human mind perceives information. It is a much more efficient way to recognise and interpret information than the statistical approaches used by most current machine learning systems. Existing technology must examine each frame of temporal data, such as video, as a still image, which greatly increases the amount of data required to produce accurate results. The human mind can receive inputs from different senses and merge them in a meaningful way to create complex, abstract relationships between information. The ML Accelerator structures raw data as blocks of information allowing it to extract meaning and infer relations among different elements within an image, video or any other data type. This pre-processing significantly reduces the complexity of models and speeds up decision making. The approach also means machine learning can be deployed as edge applications, because they no longer need to rely on massive dedicated datacentres and specialised hardware. Consequently, companies can adopt machine learning more quickly and opportunistically to address their organisational requirements.

“Current machine learning applications need dedicated hardware to make them run efficiently, because of the processing power required to run these models in real-time,” said Christiaan Erik Rijnders, CEO and founder, Cogisen. “The ML Accelerator will dramatically improve the way machine learning processes data, opening up a wide range of highly responsive applications in mobile and social, the Internet of Things and autonomous vehicles. For example, video consumption is growing exponentially as we view an average of 67 minutes per day and today’s machine learning is struggling to process this volume of data quickly; that pressure is only going to increase as we will be consuming 84 minutes a day by 2020, which is a significant opportunity for Cogisen to provide a workable solution.”

The ML Accelerator is one of a number of sophisticated mathematical algorithms, which Cogisen is developing in the Cognitive Modelling Laboratory at its Rome headquarters to underpin the Cogisen Cognitive AI Platform. One focus is on video, reflecting its growing importance to a wide variety of applications, such as detecting action in different scenarios including pedestrians crossing the road in front of autonomous vehicles. The engineering team is also extending the platform so it can use inputs from diverse sources, such as communications networks, quantum dot data, 3D meshes, industrial process data, fluid dynamics telemetry and more.

**About Cogisen**

Cogisen is made up of a team of world-class experts developing AI cognitive modelling technology to extract meaning, intent and context from video and other inputs. The innovative and patented AI algorithms underpinning the Cogisen Cognitive AI Platform are opening up a wide variety of market opportunities. The company is starting to demonstrate its use in fields such as detecting specific actions in security camera applications and monitoring communications networks for cybersecurity threats. The company's Cognitive Modelling Lab is also building applications for industries as diverse as mobile and social, autonomous vehicles and the Internet of Things.

For more information, please visit: [www.cogisen.com](http://www.cogisen.com)

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