



Cogisen Extends SENCOGI® to HEVC/H.265, Full HD and 4K Content

Expanded product line-up is the first output from the Cognitive Modelling Lab

6th of March 2018, Rome, Italy – Cogisen, the developer of video processing and artificial intelligence (AI) technologies, has today announced significant enhancements to its SENCOGI® compression technology. SENCOGI® is already available for the H.264 codec and has been validated commercially as a state-of-the-art plug-in for standard smartphone and PC video resolutions. Cogisen is now extending its compression functionality to Full High Definition (1080p full HD) and 4K and is adding compatibility for the HEVC/H.265 codecs. This is important, because it expands the use of Cogisen’s technology to high-end content applications, such as streaming movies, high definition security cameras and Cloud services. This is the first of a number of innovations that will be released in the coming months by the newly formed Cognitive Modelling Lab, which has started developing artificial intelligence (AI) cognitive models to improve how meaning, intent and context are extracted from visual content.

Plugging SENCOGI® into codecs enables service providers to prioritise the areas of a video that are most important to the viewer and improve the overall user experience. Cogisen is responding to growing demand from service providers, as compression becomes ever more important to video streaming, with full HD and 4K video being adopted to enrich content services. Limelight Network’s “State of Online Video” 2017 Report¹ estimates the average amount of time spent each week watching online video has gone up 34% to 5 hours 45 minutes on average. Service providers must ensure there are no delivery issues, because the same survey estimates that more than 67% of viewers will stop watching a video if it rebuffers twice. This is a significant opportunity for Cogisen’s SENCOGI® compression product, as it reduces the amount of storage and bandwidth required due to a motion saliency model which can be used as an encoder plugin. It operates effectively in noisy, low bandwidth as well as high resolution environments, achieving 40% bandwidth savings without noticeable loss of quality while keeping latency low. This alone translates into opportunities worth hundreds of millions of dollars per year for the content and media industries.

“We are delighted with the progress our SENCOGI® compression product is making and it is no surprise we are seeing interest from a wide variety of application providers, who rely on video content,” said Christiaan Erik Rijnders, co-founder and CEO, Cogisen. “Bandwidth is a major issue as video content becomes richer, so being able to compress video streams is essential to ease performance concerns. Our Cognitive Modelling Lab has been able to prove SENCOGI® delivers significant savings thanks to its dynamic motion and sequencing innovation. The team is now working on integrating our AI cognitive _____

1 "[The State of Online Video 2017](#)" Limelight Networks



modelling technology, because we believe we can deliver efficiencies not just in how visual content is processed, but how meaning, intent and context are extracted.”

Cogisen has also released a perceptual model plug-in for SENCOGI® specifically optimized for security camera applications, because these systems are increasingly using high definition image technology, and this exerts significant pressure on bandwidth. In the coming months Cogisen will also be releasing Field Programmable Gate Array (FPGA) acceleration for H.265 Cloud applications, which will be aimed at the real-time streaming of content. This will be useful for applications such as live conferencing, where video must be compressed on the go to maximise the available bandwidth. Using SENCOGI® allows service providers to offer real-time video and avoid switching off quality settings in the live video.

SENCOGI® is an industry-leading compression product, which can plug into current server, mobile or programmable hardware platforms to reduce the spiralling hardware costs of processing visual content. While current technologies process video as a sequence of individual still images, SENCOGI® uses dynamic motion and sequencing to extract and combine information that is only found throughout all the frames. It can do this by using sophisticated mathematical algorithms to mimic the ways the visual cortex recognises objects, allowing Cogisen to engineer and codify the information necessary for effective compression of content.

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 technology platform open up a wide variety of market opportunities with next generation technologies such as 4K and in emerging markets struggling with bandwidth constraints. It will be applicable to many vertical markets including gaze tracking, autonomous vehicles, Internet of Things. Cogisen is also the first Italian technology company to receive EU Horizon 2020 SME Phase II Funding for open innovation in IT. For more information, please visit: www.cogisen.com

Contact Information

Jacopo Passacantilli

Cogisen

+39 (335) 687 2903

jacopo@cogisen.com

Cairbre Sugrue

Sugrue Communications for Cogisen

+44 7502 203 769

cairbre@sugruecomms.com