Kepler Vision Launches New Computer Vision Solution For Elderly Care

- Kepler Night Nurse Edge Box simplifies the installation and running of patient monitoring at night

- Proprietary computer vision technology allows staff to respond immediately to patients in distress, and virtually eliminates false alarms

Amsterdam, March 10 2021 — Global leader in vision-based human activity recognition software Kepler Vision Technologies today announced the launch of its Kepler Night Nurse Edge Box. Designed to process Kepler Vision's Night Nurse (KNN) software, this new device uses computer vision technology to increase the safety of patients at night, and allow care workers to focus on providing better quality care.

Through the use of deep learning and computer vision, KNN is able to detect both falls and when patients are in physical distress, automatically alerting staff when they need assistance. Replacing old sensor systems such as bed mats, motion sensors and other sensor devices, including necklaces and bracelets, the software allows staff to immediately respond to patients and eliminate 99% of false alarms.

Once the Night Nurse Edge Box's initial three month calibration phase is complete, video feeds of patients no longer leave the premises of the care facility, giving both patients and staff a feeling of greater privacy. After this three month period, live video feeds are analysed in the Edge Box without ever being seen by any human being. The only outputs from the Edge Box are text alerts to staff that are sent when patients need help. This removes concerns around having video cameras monitoring patients , while still enabling staff to instantly respond when something is wrong. Furthermore, the solution frees up staff to engage in other work that would otherwise be wasted.

Dr. Harro Stokman, CEO of Kepler Vision Technologies, said: "We are incredibly excited about the new functionality and flexibility that the Kepler Night Nurse Edge Box provides in looking after the wellbeing of patients at night. This new product combines the proven effectiveness of our Night Nurse solution with reduced set up cost and complexity, and removes the need for a constant high speed internet connection processing many feeds at once. Given the current state of the care home industry, we are proud to be offering something that reduces the strain on staff by allowing them to more effectively administer care, without sacrificing the privacy of patients."

Uniquely among computer vision video processing solutions, Kepler Night Nurse can analyze fisheye lensed video feeds without "straightening" the images - something with which human operators have great difficulty. In addition, running the video processing locally on the Edge Box instead of running it in the cloud eliminates the need to compress video streams. This allows for more close up inspection of what is going on in the video, providing increased accuracy and reliability of the computer vision software.

Beyond simply alerting care staff to a patient in need, Kepler's Night Nurse solution can be customised by the caretakers to identify different causes for concern across their patients. For example if a patient is having trouble standing up, or is spending an unusual amount of time in the bathroom, the software offers self-service functionality for staff to send alerts fitting the specific needs of the patient. In addition, the KNN reporting can automatically add accurate behavioural observations to a patient's medical file which can help doctors with long-term patient monitoring - identifying behavioural patterns that may indicate a change in wellbeing.

Kepler Vision's Night Nurse solution is the world's first computer vision-based fall detector to be awarded medical device status. Its computer vision powered software officially registered as a medical device in compliance with the European council directive 93/42/EEC. The registration signifies that the software has been tested both internally and in the field to meet the highest specifications and that risk assessments and mitigating measures have been met. The software encodes seventeen patent applications of which three have been granted, with a further 15 pending.

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About Kepler Vision Technologies

Kepler Vision Technologies is a Dutch company which uses artificial intelligence to look after the well-being of humans at night through vision-based human activity recognition software.

Kepler Vision's mission is to make the job of nurses operating in elderly care homes less stressful and more enjoyable by allowing them to focus on providing care - not chasing false alarms and writing endless reports.

To achieve this Kepler Vision's Night Nurse solution analyses live video streams, recognizing if and when clients need care and informing staff accordingly.

Kepler Vision Technologies is a spinoff company from the University of Amsterdam. To date, it has received investment from organisations including UvA Ventures and the Netherlands Ministry of Economic Affairs totaling over €3.9 million.

The company is headquartered in Amsterdam and employs 15 people with expertise across machine learning, computer vision and healthcare.

The company website is here: <u>https://www.keplervision.eu/</u>

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