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Seeing Machines Limited  
("Seeing Machines" or the "Company")

### **NEW PRODUCT RELEASES**

Seeing Machines (AIM: SEE), a leading developer of advanced computer based imaging software systems, announces the release of:

- faceLAB® 4.5 a new version of its flagship human performance measurement product
- Driver State Sensor (DSS) DSS 2.0 the second generation of its driver monitoring system

These will be launched at the Driving Assessment Conference in Washington, 9-12 July.

#### **faceLAB® 4.5**

faceLAB® 4.5 introduces a new class of precision gaze tracking algorithms, inspired by the development of the TrueField Analyzer, the company's revolutionary new medical device. These algorithms dramatically enhance the performance and accuracy of faceLAB® when used to track gaze direction on computer and video screens, for instance, in applications such as website usability analysis and market research.

The new "precision mode" algorithms track the gaze direction of each eye in true 3D, and enable a 1-click setup (automatic initialization) for everyone, including people wearing glasses. To reduce set-up time, tracking is performed from a single camera platform without the need for additional light sources to be placed around the screen. In addition, the volume of the tracking zone has been more than doubled, to allow the subject more freedom of movement. The accuracy of the head-tracking is also improved through the use of the precision eye tracking data.

Traditional "classic-mode" gaze tracking used in vehicle cockpit tracking has also been improved with upgrades to the performance of the head-tracking algorithm, which is now more stable and adaptive to changing conditions.

Nick Langdale-Smith, Director of Sales and Marketing at Seeing Machines said "This version of faceLAB® delivers significant performance improvements particularly for applications in the rapidly growing market segment of on screen gaze tracking and will enable us and our distributors to pursue this market aggressively.

We have chosen the Driving Assessment conference for the launch as it is a fantastic forum to showcase these exciting new products to the key people in transport safety who are a key customer group for both faceLAB® and the DSS."

#### **DSS2**

The Driver State Sensor allows the fully automatic measurement of the driver's fatigue level, and now also driver distraction. Estimates of the US based National Highway Traffic and Safety Authority (NHTSA) show that 30%-40% of all large truck crashes are related to driver fatigue, while a recent large scale study at the Virginia Tech Transportation Institute showed that up to 80% of all traffic accidents are related to driver distraction.

Nick Cerneaz, CEO of Seeing Machines, said: "In addition to improving existing driver fatigue functionality, the DSS2 release adds a number of new and important features, including the fully automatic detection of driver distraction and a new camera system with automotive specifications. This product is now ideally suited for large scale driver behaviour studies and fleet operator driver monitoring and awareness applications. Initial sales to partner companies ahead of the formal launch have already been strong and we have also signed a number of product evaluation agreements with automotive OEM companies. This technology has a tremendous opportunity to make a significant dent in the rate of serious crashes due to driver fatigue and distraction, and we are excited about the prospects for the DSS2 in this regard."

Trent Victor of Volvo Technology, and a director of Seeing Machines, has been working with driving monitoring systems for over 10 years at Volvo, and said of the DSS: "This technology has redefined the state-of-the-art. Operating fully automatically, the DSS2 achieves a level of performance previously unseen and the technology now becomes a real contender for serial production systems."

Further information about Seeing Machines and these products can be obtained from the company website [www.seeingmachines.com](http://www.seeingmachines.com).

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**Notes to editors:**

About Seeing Machines

Seeing Machines is an award winning Technology Company which focuses on vision based human machine interfaces. Formed in 2000 in Canberra, Australia, Seeing Machines' purpose is to commercialise its computer-vision across a range of industries and applications.

Seeing Machines deliver advanced computer vision solutions for researchers and developers in human factors, transportation safety, computer human interaction, robotics, medical research and psychology. The flagship product faceLAB® provides an automated and contact-free gaze and head tracking technology, it solves the problem of observing human behaviour naturally, non-intrusively and with a high degree of accuracy and usability. Building on these unique face tracking and pupil measurement and monitoring capabilities, the TrueField Analyzer® is a development undertaken by Seeing Machines in partnership with colleagues from the Research School of Biological Sciences (RSBS) at the Australian National University (ANU).

The TrueField Analyzer® offers a new objective method to help doctors diagnose and manage a range of eye diseases including glaucoma, age related macular degeneration and diabetic retinopathy. Glaucoma affects about 2-3% of the population over 40 years of age and is a leading source of blindness. Unlike most other devices available to the clinician the TrueField Analyzer is a completely objective test and it is quick and easy for patients and technicians alike. The device measures both eyes concurrently and due to the reliability that arises from the objective nature of the test, it has the potential to become a new standard in the measurement of visual field defects and thus in the diagnosis and management of disease such as glaucoma.

More generally Seeing Machines' computer vision systems are able to measure the orientation and position of a human head, estimate eye-gaze direction, detect eye blinks and track other facial features. This functionality is achieved entirely through visual means, using video cameras connected to advanced image processing software, with no attachments required on the subject. Products such as faceLAB® are designed to allow human factors researchers and designers to assess the interaction of an operator in an environment and this finds application in designing operator environments, such as cockpits for cars, trucks, trains, and aeroplanes for instance, and other industrial design applications, as well as medical and psychological research situations. The technology also has application in monitoring automobile drivers and if it detects drowsiness or that the driver is distracted and their attention has been diverted from the road, an alarm can be raised to alert the driver to either pull over and rest in the case of drowsiness or to pay more attention to the road.

The systems work in real-time, enabling the behaviour of subjects to be tracked in real-time. This technology is paving the way in promoting safer driving conditions and works to enhance the driving experience and to eliminate accidents caused through driver drowsiness or distraction.

There are many different sectors that can benefit from this revolutionary software, for which it has been developed, including: automotive; academic research; medicine/healthcare; defence; autostereoscopy (next generation displays); sport; and games.