

PRESS RELEASE

CentraleSupélec will show two startups created by its student engineers At Las Vegas CES

Paris, December 14, 2017 - CentraleSupélec will be present at Eureka Park of CES (Consumer Electronic Show) in Las Vegas from January 9 to 12, 2018. CentraleSupélec is a School for future engineering entrepreneurs. Its Incubators (Gif-Sur-Yvette and Rennes) are home to business creation projects run by students from the School research teams in the course of their training. Two projects have been selected and will be presented at CES by the School. For this first year, Immersive Therapy and Kryole will benefit from the opportunity.

Immersive Therapy is an innovative technology startup which was created at CentraleSupélec in 2017 on the Rennes campus by a student Lilian Delaveau and Renaud Séguier and Catherine Soladié, teacher-researchers at CentraleSupélec. Their goal is to design and build ludic therapeutic platforms via virtual and augmented realities implementing and bringing in a serious game vision to the medical world. The first aim of Immersive Therapy is to provide patients who suffer from chronic tinnitus with a new way of self-care based on our ever more connected and digital daily life.

Gaming against Tinnitus? Diapason is the first game application that treats tinnitus as to restore silence at last.

Issued from research and development work of both CentraleSupélec and Cognac-G (CNRS Joint Research Unit), the Immersive Therapy startup unveils **Diapason**, a solution to relieve the daily needs of 10% of individuals including a growing number of young people suffering from tinnitus. Diapason is an application that apprehends and analyzes the ear and tinnitus level to propose an autonomous user pathway based on the "serious game" as to lastingly cure thanks to a 15-minute daily practice of a ludic application over three to four months.

Tinnitus affects 10% of the world population and 2% of cases suffer from disabling chronic tinnitus. In France over ten years, nearly 100,000 new cases per year have been numbered in an increasingly young population. Tinnitus has become a real public health issue.

With Diapason, patients will easily attend to their own care and become actors of their therapy.

The application will first assess the level of tinnitus and help patients make their own audiograms through the game as to feature tinnitus range and level, then complete a questionnaire that will best describe it.

The therapeutic sequence activities are developed with ENT doctors who validate each stage of this new digital method. Clinical tests are carried out at Pitié-Salpêtrière hospital under the control of Dr. Catherine de Waele, ENT and Director of Research at CNRS.

Accessible on a smartphone (available on Android and iOS in a few months) and on the Web, Diapason will accompany the patients in their care around several activities less than five minutes each. Thus, patients will take charge of their health and become actors of their own therapy.

Contact Immersive Therapy: lilian.delaveau@immersivetherapy.fr

(@immTherapy - immersivetherapy.net/)

Immersive Therapy @ CES: The Venitian, Sands Expo Hall G Stand 52107

Green Reflex: K-Ryole, a smart electric trailer promoting zero carbon mobility.

Nicolas Duvaut and Gilles Vallier, both CentraleSupélec graduates, founded K-Ryole startup in 2016 and created the "smart trailer". With a capacity of carrying up to 250 kg, the electric trailer can be hitched to any bicycle saddle thanks to an innovative docking system. A single chassis can hold varied modules to meet a wide range of uses.

K-Ryole has already designed three models which are currently in pre-industrial phase and testing, in particular with La Poste services.

The startup, which counts up to one- million-euro turnover as of 2018 and ten employees, is about to launch a generalist model capable of transporting all kinds of objects.

A concentrate of technology for a wide range of uses.

The smart trailer is equipped with one motor per wheel and sensors that measure the thrust effect between the bike and the trailer 100 times per second. An onboard computer can control the motors, so the trailer pace is stalled on that of the bike at any time. Technically, the solution is based on an algorithm which monitors the connection between the force sensors installed between trailer and bicycle, and the two electric motors located in the wheels. Every ten milliseconds, an analysis on K-Ryole route is made to inform the system whether to help the cyclist's effort or not.

K-Ryole has been awarded numerous prizes including 2017 "Jeune Ingénieur Créateur" Award of Norbert Ségard Foundation.

K-Ryole contacts:

Nicolas Duvaut: <u>nicolas.duvaut@k-ryole.com</u> - Gilles Vallier: <u>gilles.vallier@k-ryole.com</u>

(@K Ryole - www.k-ryole.com/)

K-Ryole @ CES: The Venitian, Sands Expo Hall G Stand 52107

About CentraleSupélec:

CentraleSupélec, a Public Institution of a scientific, cultural and professional nature, was created by the merging of Ecole Centrale Paris and Supélec in January 2015.

Today, CentraleSupélec consists of 4 campuses in France. It has 4,700 students, 3,500 being engineering students, and includes 16 laboratories or research teams. As an international School, CentraleSupélec is also located in China, India and Morocco.

CentraleSupélec is a reference center in the field of engineering sciences and systems and a leading School in higher education and research, ranked among the best institutions in the world. CentraleSupélec is a founding member of Paris-Saclay University and chairs Ecole Centrale Group. www.centralesupelec.fr

Press contacts:

Laurence Wendling – laurence.wendling@centralesupelec.fr – Tel: 01 75 31 61 15 Renaud Séguier – professor / in charge of CentraleSupélec FAST Team / IETR renaud.seguier@centralesupelec.fr - Tel: +33 2 99 84 45 35