BIOMEDICAL

REACH BIONICS

Develops technology that harnesses EMG signals from vestigial human muscles around the ears to create hands-free, wearable controllers.

Headset applications include computer cursors, video game controllers and motorized wheelchairs.

Sandy Heck | sheck@reachbionics.com | @reachbionics | #75291

VERISTRIDE

Biomechanical analytics of gait using biosensor insoles/app/server wireless connections to give users information about their movement abilities, including real-time information and feedback.

Announcing and demonstrating latest platform with instant analysis for rehab patients and customers working on symmetry.

Stacy Bamberg | stacy@veristride.com | #75388

COMMUNICATIONS & IT

S2 CORP.

Developed technology for ultra-wideband radio frequency sensing and signal processing. The technology has the potential to help extend the reach of spectrum communications, including those for environmental testing, passive surveillance systems, intelligence community spectrum sensing, and navigation.

Kristian Merkel | merkel@s2corporation.com | #75384
EDUCATION & ENTERTAINMENT

THE SPIRITUALITY NETWORK INC. (REVOLUTION eLEARNING)

Enhances the effectiveness of MOOCs, online webinars and multi-modal learning environments. Embedded technology allows an online teacher to quickly sense how engaged students actually are by providing subtle feedback cues such as facial expressions, gaze and other body kinesics.

Will showcase a next-generation e-learning technology platform that combines machine vision functionalities with learning analytics, and social networking capabilities for use in e-learning frameworks.

Ian Bennett | info@revolutionelearning.com | @revolutionelearning.com | #75386

ENERGY

IMPRINT ENERGY

Developing battery technology to address the power needs of small portable electronics and to enable a multitude of wearable technology and wireless sensing and communication applications.

Will demo wearable and wireless device prototypes enabled by Imprint Energy’s ultrathin, flexible, rechargeable batteries.

Brooks Kincaid | info@imprintenergy.com | @imprintenergy | #75187

TRX SYSTEMS INC.

Delivers location and mapping everywhere. The TRX NEON Location Service uses sensor fusion and crowd-sourced mapping to deliver location within buildings where GPS does not work, without relying on installed beacons or other infrastructure. The software combines information from built-in sensors in devices to crowdsourc 3D building maps and uses these maps to pinpoint people’s location.

Will demonstrate crowdsourced map building and 3D indoor location.

Carol Politi | cpoliti@trxsystems.com | @TRX_Systems | #75390

ZILLIONINFO

Developing commercial redistricting software products that can be used by non-experts. Redistricting or rezoning is an extremely challenging task that is commonly needed in many real-world problems, such as political and school redistricting, emergency zone design, package delivery, and business planning.

Products will provide flexible and easy-to-use software tools to meet the needs of several specific niche markets and the general public.

Bonan Li | bonan.li@zillioninfo.com | #75181
Lion Semiconductor

Developing integrated voltage regulators that are 10 times smaller than existing solutions. Mobile devices currently use integrated circuits that deliver power from the battery to different areas – an efficient but bulky solution.

Integrated voltage regulators have the potential to save board space to make room for new mobile device features or allow for increased battery size to improve smartphone battery life.

Wonyoung Kim | wonyoung@lionsemi.com | #75290

Keen Home

Developing a smart vent that opens and closes to reduce uncomfortable hot and cold spots, save energy in unused rooms, and tailor a home’s heating and cooling to fit specific lifestyles. The new wireless system will respond automatically based on users’ habits and presence.

Will McLeod | will@keenhome.io | #75284

SmarterShade

Created an integrated shading system that allows any window to go from clear to dark with the touch of a button. The technology aims to fundamentally change how users interact with their window systems to control glare, privacy and reduce energy use in a building.

Will show its window treatment solution, similar to “smart windows,” but designed to be more durable at a lower cost.

Mike Stacey | michael.stacey@smartershade.com | 312.375.2867 | @smartershade | #75284

Sun Innovations

Developing a fully functional, color, transparent display screen prototype, based on a set of nanophosphors with highly fluorescent quantum efficiency and well-controlled nano-particle sizes.

This technology will enable an entire vehicle windshield or building glass windows to act as an electronic display screen, without affecting the optical clarity.

Ted Sun | ted@sun-innovations.com | #75282
MATERIALS, MANUFACTURING & ROBOTICS

Empire Robotics Inc.

Has created the VERSABALL®, a spherical robotic hand filled with granular material that conforms to and grips objects.

Empire’s team of soft robotics experts, materials scientists and experienced automation engineers are serving diverse technology fields, including agile manufacturing automation, collaborative robotics, prosthetics and space robotics.

John Amend | john@empirerobotics.com | @EmpireRobotics | #75183

Graphene Frontiers LLC

Develops thin film graphene solutions and products. Graphene Frontiers is building low-cost commercial-scale graphene production and processing technologies to enable revolutionary products using nanoscale films on a macro scale.

Consumer electronics applications include flexible, resilient displays for tablets and smartphones, and low-cost, low-power, high-sensitivity chemical detection for wearable sensors.

Bruce Willner | info@graphenefrontiers.com | @TeamGraphene | #75185

InView Technology Corp.

Developing a low-cost, multi-color, short-wave infrared camera that can be directly mounted on microscopes for scientific, industrial and biomedical imaging. The camera is based on “compressive sensing,” a new sampling technique that reduces data collection requirements for high-resolution imaging to below Nyquist limits.

Will demonstrate its computational imaging platform enabled by the patented InView210™ broadband shortwave infrared camera and CompressView™ software.

Lenore McMackin | Lenore.McMackin@InViewCorp.com | #75189

NextInput Inc.

Developing a force-sensitive touch surface technology that replaces other more-expensive solutions that require more power. Aims to enable a more intuitive way to interact with electronic devices.

Will demo ForceTouch™, which senses the location and amount of force from each touch point down to sub-millimeter spatial resolution, and sub-millinewton force resolution.

Ryan Diestelhorst | ryan@nextinput.com | #75287
SPEC SENSORS LLC

Making gas sensing a part of everyday life. Combining expertise in reliable and time-tested sensing technologies with novel manufacturing techniques to produce sensors small enough to go anywhere while maintaining the high performance critical to delivering useful information.

Joseph Stetter | jrstetter@kwjengineering.com | #75286

VAPORSSENS

Has created a device that gathers data from sensors at five times the performance as similar devices and uses a sleek, modern software interface. The SiGZIG data logger will be available at a lower cost to engineers, hobbyists and makers everywhere — for use in garages, workshops, universities and maker spaces.

Will demo easy-to-use data acquisition for alcohol sensors, motion sensors, pressure sensors, among others.

Benjamin Rollins | ben.rollins@vaporsens.com | #75391

NSF booth #75280

FOR MORE INFORMATION CONTACT:

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