

## Future Medical Advances through Crowd-Sourcing: microMedic 2013 National Contest Winners

Rocklin, CA - The U.S. Army Medical Research & Materiel Command's (USAMRMC) Telemedicine and Advanced Technology Research Center (TATRC), Carnegie Mellon University Entertainment Technology Center, and Parallax Inc. teamed up to offer almost \$30,000 in awards to inspire the next generation of medical innovation. The 2013 National microMedic contest was an opportunity to show the country what citizens could do with new technology - encouraging technical innovation with significant use of microcontrollers and sensors in the medical industry.

The 2013 National microMedic Contest drew entries from all over the country and were submitted by everyone from middle school students to health care professionals and electronic engineers. David Dorhout claimed the top prize in the public division with his Triage Training System that provides life-like vitals simulation and coaching instructions for better reenactment of crisis scenarios. "My hope is that the Triage Training System allows more first responders to receive the kind of advanced, realistic training that will equip them with the tools and experience that will help them save more lives," said Dorhout, co-founder of Dorhout R&D LLC.

Contest submissions also included applications to help those recovering from life-altering events such as limb amputations and strokes. A microcontroller and brainwave controlled prosthetic hand developed by a high school student captured the top prize in the educational division. The prototype system was an impressive proof of concept for a lower cost, less invasive prosthetic. Projects like these are likely to usher in the next wave of medical innovation.

The judging panel comprised of U.S. Army TATRC's Dr. Thomas Talbot, renowned electronics author Forrest Mims III, Dr Kevin Kunkler of JPC-1 MTHIS and Dr. Stephen Steffensen from the Surgeon General's Innovation Team were impressed with the quality and ingenuity of the submissions. "Our hope with this contest was to elicit new ideas that have the potential to benefit service members, wounded warriors and civilians. We're confident we can incorporate these technologies to do just that," stated Dr. Thomas Talbot, Scientific Domain Coordinator for Medical Simulation at the U.S. Army, TATRC.

Winners will be acknowledged at the International Meeting on Simulation and Healthcare (IMSH) in San Francisco, California in January. To view winning applications visit <http://www.learn.parallax.com/inspiration/micromedic>.

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#### About Parallax Inc:

Parallax designs and manufactures microcontroller development tools and small single-board computers as well as a vast array of products including project boards, robotics kits, educational tools, and sensors. Parallax is dedicated to providing the electronics industry with products that are technically innovative, unique, and economical while staying committed to thoughtful, creative design and quality workmanship. Parallax Inc. is a privately held company located in Rocklin, California.

#### About U.S. Army (TATRC):

The Telemedicine and Advanced Technology Research Center (TATRC) provides tele-health solutions and executive medical research management to enhance and support military healthcare and promote innovative medical technologies. TATRC serves as the primary execution manager for Defense Health Programs research while exploring science and engineering technologies ahead of programmed research, leveraging other programs to maximize benefits to military health care. TATRC is the science and technology scout for military medicine and the center of gravity for Army telemedicine initiatives. TATRC initiates, sponsors, promotes and oversees programs and partnerships in medical science and engineering that support military medical programs. For more information, please visit: [www.tatrc.org](http://www.tatrc.org). This initiative is supported under contract #: W81WXH- 12-20004.

#### About Carnegie Mellon (ETC):

The Entertainment Technology Center at Carnegie Mellon University is the premiere professional graduate program for interactive entertainment as it is applied across a variety of fields. The ETC offers a unique two-year Masters in Entertainment Technology degree that is jointly conferred by the School of Computer Science and the College of Fine Arts. We emphasize leadership, innovation and communication by creating challenging experiences through which students learn how to collaborate, experiment, and iterate solutions. The ETC is simply different, we strive to design experiences that educate, engage and inspire.

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