

## FOR IMMEDIATE RELEASE:

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## LIFT Highlighting Robotic Blacksmithing at 2016 IMTS Smartforce Student Summit

Announces Phase One Launch of Blacksmithing Competition

**DETROIT** – LIFT – Lightweight Innovations For Tomorrow and The Ohio State University Center for Design and Manufacturing Excellence (CDME) announced they will showcase the next wave of manufacturing technology – Robotic Blacksmithing – at the 2016 International Manufacturing Technology Show (IMTS) in Chicago, while kicking off the first phase of a nationwide Robotic Blacksmithing competition.

LIFT and CDME have identified computer-controlled manufacturing/computer controlled reshaping, also known as Robotic Blacksmithing, as the next breakthrough in manufacturing technology, and are seeking teams of students to help innovate by joining the "LIFT Prize in Robotic Blacksmithing" competition.

At IMTS, LIFT and CDME will discuss the competition and the significance Robotic Blacksmithing will have on the future of the manufacturing industry during its presentation: September 12-13, 2016 from 1:30-2 p.m. in the *FIRST* Theater at the Smartforce Student Summit (Room N-227, North Building, McCormick Place).

As announced this summer, "LIFT Prize in Robotic Blacksmithing" is a LIFT Education and Workforce Development Initiative in which high school and college students from around the country can participate, innovate and earn cash prizes. It provides the students with a more creative approach to learning, as well as an exciting way to stay engaged, particularly in science, technology, engineering and math (STEM) curriculum. Phase one of the competition, in which students will program a machine to reshape clay, will run through the 2016-17 school year.

The competition will kick off at the Smartforce Student Summit, an IMTS program, which provides a fun and interactive environment to introduce exciting innovations in manufacturing technology and aligns with several of LIFT's education and workforce development goals, including attracting students to and ensuring they have the foundational STEM skills for success in future manufacturing careers.

Robotic Blacksmithing incrementally re-shapes material to create components – instead of removing it, like Computer Numeric Control (CNC) machining or adding material, as in additive manufacturing. This new manufacturing method can produce higher quality parts in a more environmentally sustainable way than CNC or additive manufacturing.

LIFT and CDME will release the full rules and details for the competition on Sept. 12, 2016. This year, during the competition's first phase, students will be asked to develop processes to create pre-determined shapes from non-hardening modeling clay. In subsequent years LIFT plans to use the competition format to develop methods for shaping metal directly using all the tricks that a human blacksmith usually does – but with the reproducibility and data collection that only an automated system can provide.

**Team Eligibility:** The competition is open to students at any high school, community college, career and technical college, or college and university in the United States. Teams may be affiliated with an educational institution, or can be formed as independent clubs. Teams may solicit donations, loans and grants of cash, equipment or advice without limit. Students must take charge of the project, control the necessary equipment and resources and do the programming.

Beginning Sept. 12, students are encouraged to register their teams and see complete rules and other information by visiting <u>http://roboticblacksmithing.com</u>. Phase one judging, by industry experts, teachers and other leaders, will be completed in April 2017, with winning teams announced by the end April.

To help support the competition and invest in the future of manufacturing, LIFT encourages local manufacturers to both sponsor and mentor teams in their communities.

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## ABOUT LIFT

LIFT is a Detroit-based, public-private partnership committed to the development and deployment of advanced lightweight metal manufacturing technologies, and implementing education and training initiatives to better prepare the workforce today and in the future. LIFT is one of the founding institutes in the National Network of Manufacturing Innovation (NNMI), and is funded in part by the Department of Defense with management through the Office of Naval Research. Visit <u>www.lift.technology</u> to learn more.

## ABOUT THE OHIO STATE UNIVERSITY

The Ohio State University's main campus is America's largest and most comprehensive, with more than 53,000 students, 17 colleges and 240 masters', doctoral and professional degree programs and an annual operating budget of more than \$4 billion. Ohio State's depth and excellence is complemented by a top-five academic medical center and a premier cancer center.

Ohio State consistently ranks as one of the nation's top research institutions, with \$703 million in spending last year in areas that are critical to Ohio's ability to compete locally, nationally, and internationally. The university ranks second nationally in the amount of industry sponsored research it conducts. Ohio State has particular strength in areas such as global warming, cancer, infectious disease, advanced materials, and ag-bio products that feed and fuel the world.