



SMU

BOBBY B. LYLE  
SCHOOL OF ENGINEERING

## **GRADUATE RESEARCH ASSISTANTSHIPS IN 3-D PRINTING, PRINTED ELECTRONICS, AND SOFT ROBOTICS**

The Mechanical Engineering Department's Laboratory for Additive Manufacturing, Robotics, and Automation (LAMRA) is seeking two outstanding graduate students to join groundbreaking research projects in next-generation additive manufacturing (AM, also known as 3-D printing), with applications in soft robots, wearable technology, and medical devices, among others. Current projects include an NSF-sponsored National Robotics Initiative research effort that seeks to overcome a "grand challenge" of AM, which currently is limited to building structures from a single class of material (e.g., a polymer or a metal), but not both. Our work, at the intersection of AM and printed electronics, will enable monolithic, multi-material fabrication of devices with built-in actuators, sensors, and circuitry, allowing devices to be directly printed that are active and moving, and which sense their environments. A second major LAMRA project focuses on 3-D printing using a new class of soft materials.

Applicants with a Masters degree interested in pursuing a PhD are preferred, as are U.S. citizens or permanent residents. The successful candidates will work as a graduate research assistant with a dynamic team of faculty and students, led by a 28-year veteran of the AM industry. The position provides a monthly stipend over 12 months and full tuition waiver, and is available beginning as early as May 2015. Experience with advanced manufacturing, machine design, materials science, chemical engineering, CAD, and/or robotics is a plus. See [www.smu.edu/Lyle/Departments/ME/Labs/LAMRA](http://www.smu.edu/Lyle/Departments/ME/Labs/LAMRA) for more information.

With more than a 75-year legacy of innovation, achievement and excellence, SMU's Bobby B. Lyle School of Engineering is one of the Southwest's premier institutes of higher learning for students seeking degrees in engineering and technical disciplines. The Lyle faculty represents a world-class group of technical experts in a variety of critically important fields. On a per faculty basis, the Lyle School receives some of the largest research awards in the nation. The Lyle School continues to be ranked among the nation's best by U.S. News & World Report's ranking of Best Graduate Schools. SMU is located in Dallas, Texas, a booming metropolis with superb cultural opportunities and a very high standard of living (see <http://www.realestate.com/advice/why-you-should-move-to-dallas-64532/>).

If you are interested in this unique opportunity, please email a curriculum vitae and a cover letter explaining your research interests and highlighting relevant experience (no phone calls will be accepted) to:

Adam Cohen  
Clinical Associate Professor  
Director, Laboratory for Additive Manufacturing, Robotics, and Automation  
Department of Mechanical Engineering  
Southern Methodist University  
[alcohen@lyle.smu.edu](mailto:alcohen@lyle.smu.edu)  
<http://www.smu.edu/Lyle/Departments/ME/People/Faculty/CohenAdam>

SMU will not discriminate on the basis of race, color, religion, national origin, sex, age, disability, or veteran status. SMU is committed to nondiscrimination on the basis of sexual orientation. Hiring is contingent upon the satisfactory completion of a background check.

NOTE: Full consideration will be given to applications received by April 1, 2015.