



## **SEAM PAVILION - 3D PRINTED INFLATABLE STRUCTURE**

RESEARCH PROJECT FUNDED BY THE BARTLETT APF

Design Team:

Mollie Claypool, Manuel Jiménez García, Vicente Soler, Christina Dahdaleh, The Bartlett U19

This proposal is for a full-scale, deployable architectural pavilion that functions as a temporary pop-up shop/event space. The pavilion aims to further develop a technique using casting of flexible materials and 3D printing/additive manufacturing utilising robotics to create a seamless, flexible inflatable lattice structure. This technique addresses the problem of the seam in working with pneumatic structures as the seam is almost always the point of failure of an inflatable structure. It has been developed within the Bartlett's MArch Unit 19 in the last year and is the first of its kind. It has, however, only been developed until now at a small scale of 1:50. This aims to develop it further at different scales of design resolution, from structural considerations to the use of digital fabrication, including robotics and 3D printing/additive manufacturing.

This project is an initiative by Mollie Claypool, Manuel Jimenez Garcia and Vicente Soler together with the Bartlett's MArch Unit 19 and It will be launched in September 2015 at the Bartlett School of Architecture.

