Assembly-in-Printing: Product and Process Design

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Keywords: 3D printing, build-insertion-around, electrical-components-integration



(From: http://staff.ustc.edu.cn/~songpeng/subpage/2016-SIGGRAPH-CofiFab/index.html)

Introduction

The students are expected to develop new process to automatically design mechatronics products with freeform shape, where the actuators and sensors will be assembled into the products during the fabrication. In this project, additive manufacturing will be adopted to wrap-up plastic materials on top of existing electrical components to realize the customized shape of some consumer products.

One example can be found at: https://www.youtube.com/watch?v=xQYyGA5LMNE

Context

The major challenge in this project is to realize a function to automate the manufacturing process according to a user input shape. This project is part of research taken in the *advanced manufacturing* group in DE department.

Your Assignment

To realize the fabrication process and practice this methodology on some prototypes. For detail information, please contact Rob Scharff or Charlie Wang directly.

References

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