## Lawn Tech Art

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## **ABSTRACT**

The Lawn Tech Art Team hopes to make lawn and stadium art projects easier than ever before adapting an automated tabletop drawing robot to a larger scale and outdoor applications. We developed a robot that navigates off road terrains and pavement while drawing preprogrammed images with marking paint. The paint used is a bright yellow grass paint that the robot dispenses via a pressurized spraying system. While the applications of this robot span from artistic to practical, our team demonstrated by painting a "Block M." The robot can draw lawn art large enough for it to impress onlookers with its size that can be seen from all around. Similarly, the robot completed drawings in a time frame that captures a great deal of attention from those that pass by without appearing too mechanical. Our robot was constructed within a budget of \$400, has a rechargeable battery and paint tank, making it easy to use and affordable for residential use.