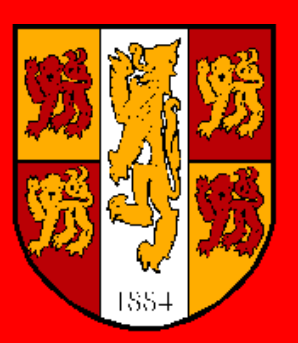


Processing Images Through Robotic Arm



PRIFYSGOL
BANGOR
UNIVERSITY

Introduction

The overall aim of this project is to program an Arduino to use a robotic arm to draw images. The project will require a robotic arm capable of moving across 2 axis on a drawing pad, an Arduino to control the movement of the arm, and a stand or easel to hold the drawing.



Aims

The aim is to get the arm to respond to commands and pre-programmed routines from the Arduino, as the Arduino changes the image requested into a set of instructions for the robotic arms to move and draw across the 2D drawing.

Challenges

The challenges of this project are that the pen must be held tight in the claw to maintain a perfect, smooth movement for the drawing, also the programming of the routines will need a lot of work to complete.

Technologies

The project will be using a single-board computer called Arduino. These have been used in thousands of projects that can be accessed online;. The Robotic Arm used will be a Thumbs Up Build Your Own Robotic Arm that is available online. As the project uses Arduino the programming language will be C++.

Student

Sapphire Fern Williams
spw18dlg@bangor.ac.uk

Supervisor

Dr David Edward Perkins
d.perkins@bangor.ac.uk