Book of Abstracts

The Louis Stokes Alliances for Minority Participation Program

Spring 2020

Supported by

New York City College of Technology

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The Influence of "Bots" and Gas Lighters on Twitter and their Effect on the General Perception of Current Events

Luc Telemaque
Prof. Nadia Benakli

The goal of this project is to analyze and visualize Twitter conversations based on the current event which the COVID-19 Pandemic. Social network analysis enables us to identify the influencers and followers of these conversations, who are often "bots" and gas lighters. Text analysis is used to grasp an understanding of Twitter users' sentiments about the disease. Netlytic, a community-supported text and social networks analyzer, was used as the primary tool for this study.

Project Cube

Ida Touray, Samuel Connors, and Jose Atiencia
Prof. Brad Isaacson

The goal of this project was to create 47 x 47 x 47 Rubik's cube.

We first started with deconstructing a regular 3x3x3 Rubik's cube. Then, we looked online for 3-D printable files called STL files for a 5x5x5 cube. We printed and manually shaved and filed each piece to be put together. Once assembled, we looked to print 7x7x7 cube parts to calibrate the printer and make sure it was printing properly. From there, we moved up to our target 47x47x47 cube. Although it's possible to print out all the pieces of a 47 x 47 x 47 piece puzzle, assembling all the pieces into one giant Rubik's cube go fill up a whole office.

This was the hard part because we couldn't find the STL files for these dimensions. This would mean we would have to model each component and design them ourselves on CAD/CAM design software. Sam was partial to SolidWorks since he's had some experience with it in the past. However, this proved to be quite an undertaking and after our collaboration was cut short due to the covid-19 pandemic, we were not able to complete the files and send it to the final printing phase.Our research along the way was still fun as we found many cool types of Rubik's cubes. The world record is a 33x33x33 cube, which is the direction we were looking to go. There were other cool ideas too, though. One Japenese engineered a self-solving 3x3x3 cube, for example. Others sough to achieve the fasted solving cubes.