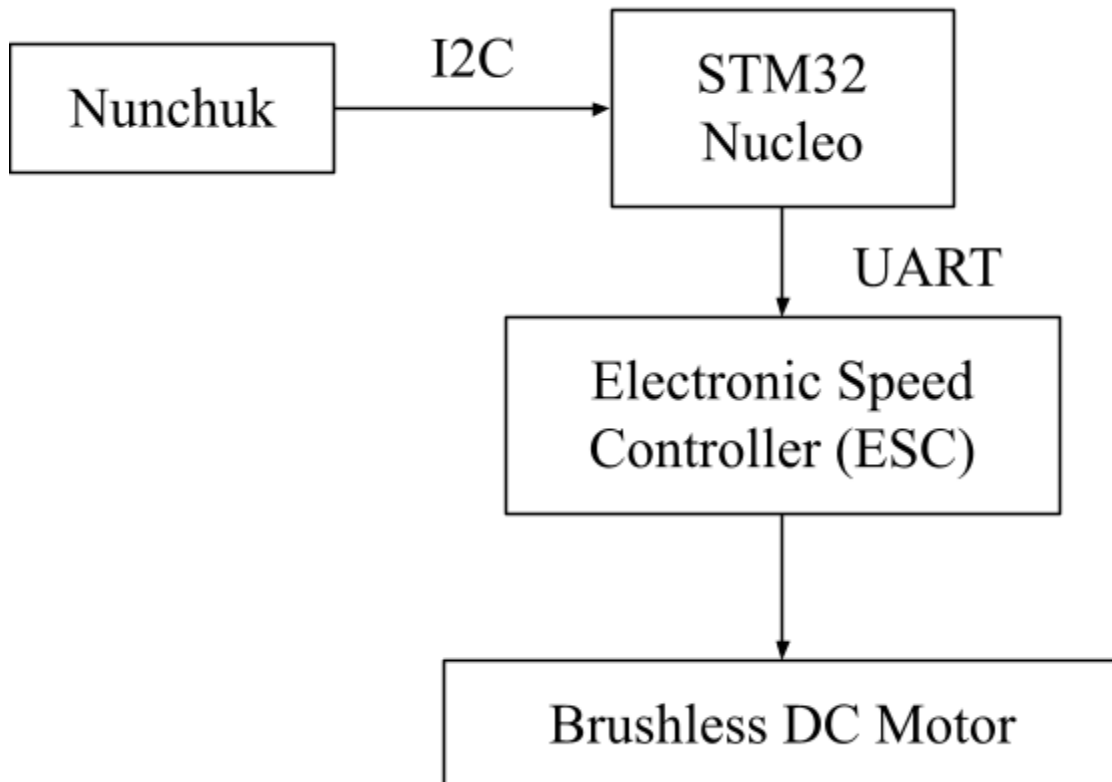


Project Proposal

- Overview/Goal/Purpose
 - Our objective is to create an electric skateboard that we can control with a Nintendo Wii Nunchuk. We will use the Nyko Kama wireless nunchuk as an input and communicate with the STM32 Nucleo board using the I²C protocol. We will then take this input data and send it to the VESC speed controller using UART protocols. The goal we hope to meet is a working electric skateboard that can move forward and backwards, and can be controlled by someone riding the board. The purpose of this project is to make a fun alternative mode of transportation.
- Peripherals
 - Wii Nunchuck as User Input
 - Electronic Speed controller as output to control motor acceleration
 - Accelerometer sensor to detect speed
- Serial interface protocols
 - Wii Nunchuck uses I²C
 - Communicate w/ VESC using UART
- Block diagram



- Responsibilities for each of us
 - Both: Researching parts required
 - Dhruv: Physical skateboard assembly, more focus on VESC UART programming side
 - Ethan: Focus on the I²C programming - want speed to be able to be controlled by nunchuck, have stm32 understand what is forward and what is backward signals.

Project Website

<https://sites.google.com/view/aggarwal-nguyen-153b-w23/home>