**Proposal:**

**Remote Controlled Car with Automatic Collision Prevention**

**Description:**

* We plan to build a remote controlled car using the IR remote with collision prevention using an infrared proximity sensor.
* Our team consists of Swapnendu Sanyal and Kaustubh Iyer.
* Hardware components:
  + Soldering- Involves soldering the motors and the sensors.
  + Creation of circuit
  + Reverse engineering in the case of the proximity sensor and driving motor
  + Aesthetics: use a good car and a hidden circuit
* Software components:
  + Implementation of a novel algorithm to use the proximity sensor
  + Implements an existing protocol
  + Custom code to communicate with a sensor
  + Synchronization of sensors and actuators
  + Implementations of scheduling policies weighing the importance of input from the proximity sensor over the IR remote
  + Use of combined interrupt mechanisms (simultaneously for the IR remote and the motor)
  + Signal modulation with IR sensors and proximity sensors
  + Use of FSM

**Link:**

<https://github.com/kkiyer1998/Remote_Control_Car>