**INSTITUTO TECNOLOGICO DE ESTUDIOS SUPERIORES DE MONTERREY**

**Applied Robotics**

**Final Project Proposal**

The following proposal includes the work of David Kutugata A01138865, Roberto De La Garza​ ​A00812611 and Franco Trujillo A00809188. As a final project for the class a robot able to play a keyboard will be made. It will be custom built, controlled with an Arduino microcontroller and will include the use of sensors and kinematics to function properly. These are the three levels of accomplishment:

**Minimum:**

The robot will press keys of the keyboard with at least one finger and create melodies, like a regular person who wants to learn piano but has no guidance from a teacher.

**Target:**

The robot will have five fully functional “fingers” that will press keys and create melodies. The robot will be able to move and play all notes within at least two octaves of the keyboard.

**Wow:**

The robot will work as described on Target accomplishment and will feature a playlist of melodies to play on command from the computer of the user. The communication between the robot and the computer will be wireless. The robot will be able to perform a piece from German composer Ludwig van Beethoven.

Students Approval

Professor Approval

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