











	Design	Slope	R-Square
Tank	Continous Track	29.95	97.4%
Super Offroad	Continuous Track	36.70	82.2%
Hovercraft	Partially Continuous Track	11.46	74.5%
Hot Rod	4-Wheel Design	12.13	46.2%
Moon Lander	6-Wheel Design	14.04	75.7%

**Figure 9: Regression model results**

### **3.2 Why the super off-road is the best choice**

It's very fast, which means it is easier for the super off-road to reach a longer distance. As it has continuous track, it is much easier for the super off-road to climb steep hills and jump over bumps without flipping over or crashing. With its lighter weight and spoiler to balance, it stays on the ground easier and balances well.

## **4. Conclusions**

### **4.1 Conclusions**

We conducted Measurement System Analysis: passed both repeatability and reproducibility and designed a successful experiment to study the Car Upgrade Potential among five different cars. We also demonstrated the Advantages of Continuous Track Design over the Wheel Design on the Mountain Stage.

### **Citation:**

1: "Wheels vs Continuous Tracks: Advantages and Disadvantages." *Into Robotics*, [www.intorobotics.com/wheels-vs-continuous-tracks-advantages-disadvantages/](http://www.intorobotics.com/wheels-vs-continuous-tracks-advantages-disadvantages/).