Risk Description	Risk Indicator(s)	Risk Rating (High, Medium, Low)	Impact Rating (High, Medium, Low)	Impact	Mitigation
Training Data Storage	Data inaccessibility or loss	Low	Medium	Unable to train deep learning model	Storage on the cloud and backup on hard disk
Hardware Failure	Hardware malfunction (broken motor, stervo, raspberry, etc)	High	Medium	Malfunctioning prototype	Keep a stockpile of replacement hardware and parts for speed replacement
Software Failure	Failure to recognize key objects (traffic signs, lane marks), bugs and conflicting decision components	Medium	HIgh	Prototype may not function as intended, such as going off the track	We need to collect enough data to train our detection models to yield high enough accuracy. We also need to test to make sure the control infrastructure on the prototype is functional. If the model doesn't perform well on the real world data, it would lead to siginifcant self-driving failure.
Out of Budget	Unable to purchase parts necessary to continue the project	Medium	Medium	Lacking parts to replace a malfunctioned part	The cost for all the different components is relatively cheap. It's unlikely that we would be purchasing item that we cannot afford
Security Concern	The testing of prototype might pose security risks to the humans and objects in the surronding environment as the car behaviors are unstable and unpredicable	Medium	Low	property damage, human injure	