- 1. Successful completion of the track with a rule based agent. Avg. Score 122.
- initial bounds on maximum and minimum speeds for brake/accelerate (0.05, 0.20)
- if a wall is ahead, determine the direction of a turn and break or coast left/right depending on distance away
- Checks for left and right lidar to keep away from sidewalls.

Score	Min Speed	Max Speed	
122	0.05	0.20	

2. Bump max speed to 0.22 -- Avg. Score 123

Score	Min Speed	Max Speed	
123	0.05	0.22	

3. Add straightaway detection to bump max speed. Start slowing and turning earlier at high speeds. Avg. Score - 129

Score		
129		

4. Revert to original setup. Better at following the line, but slower. Fix ahead distance check so coasting actually works. Score 126

Score		
126		

5. try to re-implement straightaway detection. score: 123.5 ahead threshhold 0.5 max speed  $4\,$ 

Score	Straightaway	Max speed	
124	0.5	0.4	

6. improve straightaway thresholds. score 129. ahead 4, max speed 32, add front left and front right at  $2\,$ 

Score	Straightaway	Max speed	Straightaway Sides
129	0.4	0.32	0.2

7. set left front and right front straightaway thresholds to 1.8 -- score 130

Score	Straightaway	Max speed	Straightaway Sides
130	0.4	0.32	0.18

8. increase max speed to 36 score 132

Score	Straightaway	Max speed	Straightaway Sides
132	0.4	0.36	0.18

9. bump speed to 4 and coast threshold from 2.5 to 3 --- score 128  $\,$ 

Score	Max speed	Coast Thresh	
128	0.4	3	

10. max speed 38, reg speed bump to 24. ahead 3, 1f, rf 1.8, coast threshold 3 --- 133

Score	Max speed	Speed	Straightaway Sides	Coast Thresh
133	0.38	0.24	0.18	3