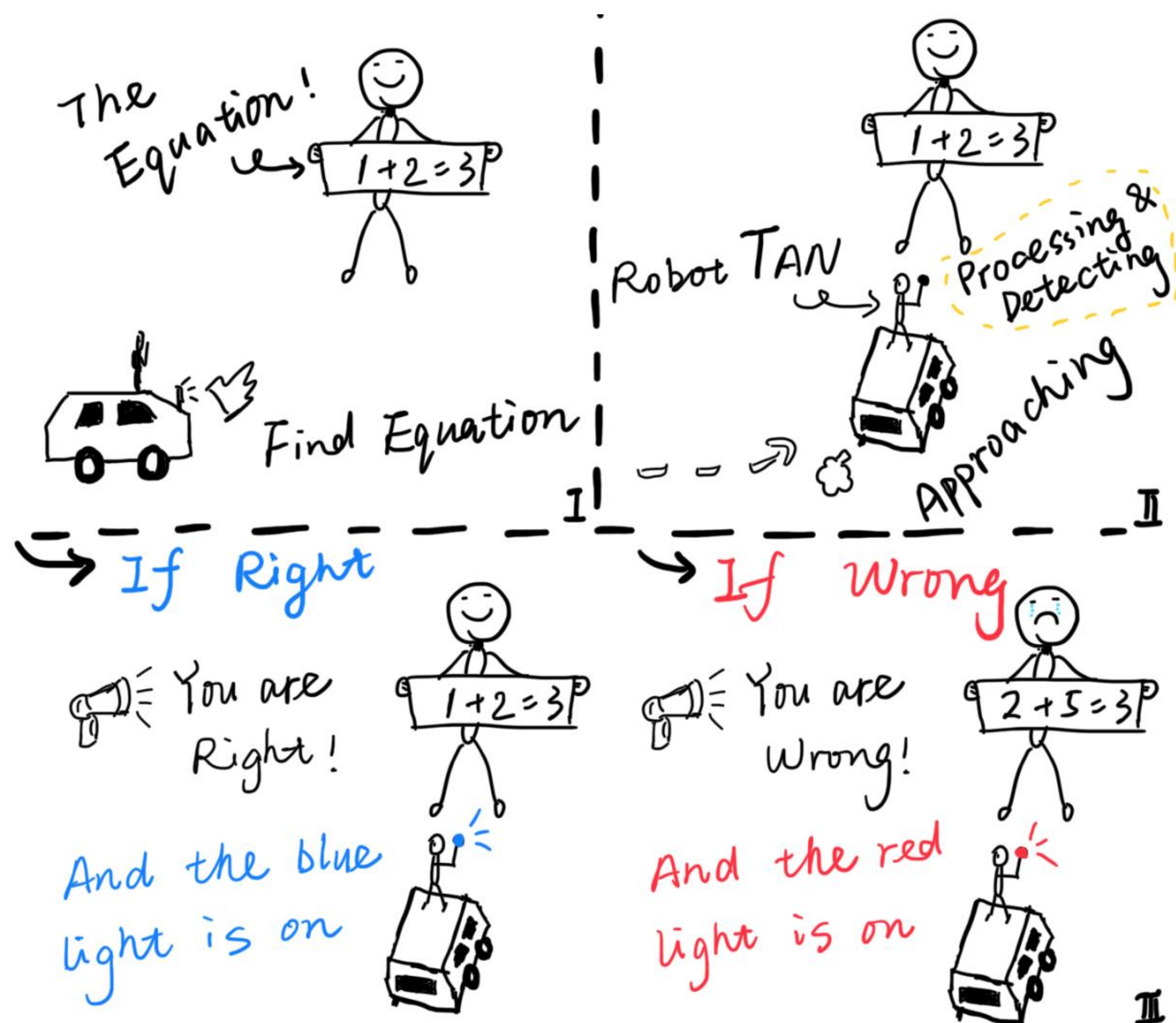
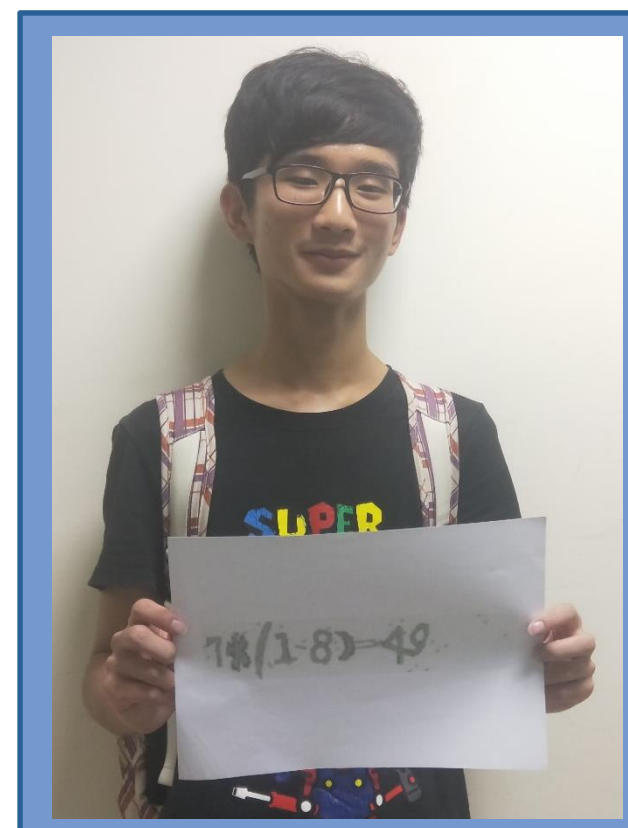
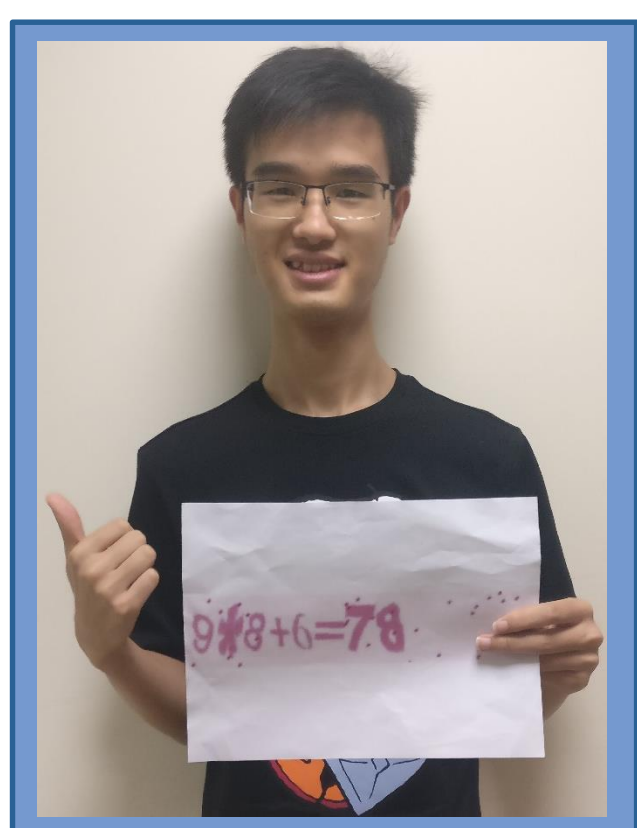


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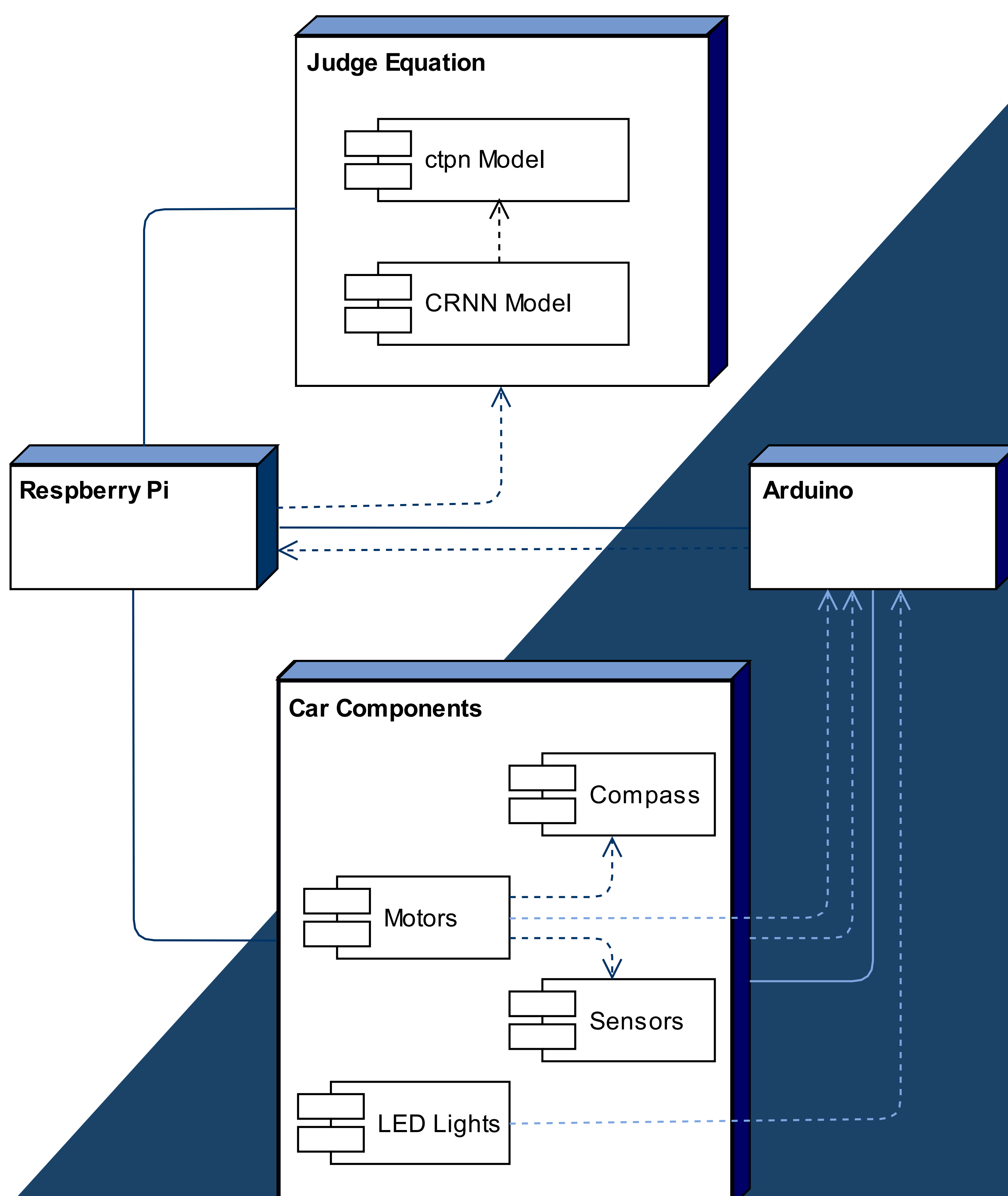
Judge the correctness of the equations!



About us ...



Deployment Diagram



Implementation (Problems and Solutions)

Prob. & Sol. 1 : We introduce obstacle avoidance function to keep the robot at a safe distance from the obstacle. However, after adding this function, some positions may not be reached due to instability of the ultrasonic sensor, etc. Therefore, we introduce obstacle avoidance switch, and the robot walking mode can be freely adjusted.

Prob. & Sol. 2 : We had trouble in adjusting the robot's moving distance and steering angle accurately, so we introduce compass and ranging sensors, which can accurately control the steering angle and moving distance of the robot.

Prob. & Sol. 3 : When the background is messy, it is difficult to find the equation from the background. We use ctpn network (variation of the fast-RCNN) to frame the equation.

Prob. & Sol. 4 : The correctness of the equation is not high. The equation recognition uses CRNN (CNN + RNN) network CNN to extract features, RNN performs serialization to identify features, and finally uses CTC method to calculate loss.