Tutor feedback:

Dear student

Thank you for submitting your design document for the software supporting self-driving cars. Your effort in researching and presenting your ideas is appreciated. However, I'd like to offer some feedback to refine and improve your work:

Introduction and Functionalities:

The architecture, inspired by Jo et al. (2014), outlines five crucial components: Perception System, Control System, Localization System, Planning System, and System Management. Within the assignment's scope, three specific suboperations are emphasized: GPS-IMU Localization, Object Detection (OD), and Path Planning (PP).

Use Case Diagram:

The Use Case diagram illustrates selected operations essential for the Autonomous Vehicle (AV) system, such as starting the vehicle, setting a destination, and validating the destination. It should also include use cases related to all proposed functionalities for the driverless car.

Activity Diagram:

Your activity diagram effectively illustrates the Object Detection (OD) operation. However, a brief description would enhance understanding of its workings.

Class Diagram:

The provided class diagrams are comprehensive but may not be sufficient. Consider including classes necessary to fully define the proposed functionality. Additionally, basic data types are shown; consider incorporating lists and queues as part of the dataset.

State Diagram:

You provided a detailed state diagram for the Path Planning (PP) Operation, but the appropriate classes are not mentioned in the class diagrams.

Overall, your work demonstrates a solid understanding of the subject matter. Addressing these areas and providing clear justifications for your design choices will further enhance the quality and effectiveness of your design document.