**Figure 1**: Functional Decomposition of W16 Aventador

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| --- | --- | --- | --- | --- | --- |
| Search the environment | Laser Scanning | Ultrasonic sensor | 3-D depth camera | Laser Scanning+ Ultrasonic sensor | 3-D depth camera+  Ultrasonic sensor |
| Find a path | A\* | Potential field | DFS | BFS | Bellman-Ford Algorithm |
| Control the motors | Open loop control | Encoder control | Landmark based navigation | Encoder + Landmark based navigation | Encoder + IMU |
| Communicate with the other vehicle/s | Wired | Wi-fi | Bluetooth |  |  |
| Physically connect the vehicle/s |  |  |  |  |  |
| Carry payload |  |  |  |  |  |