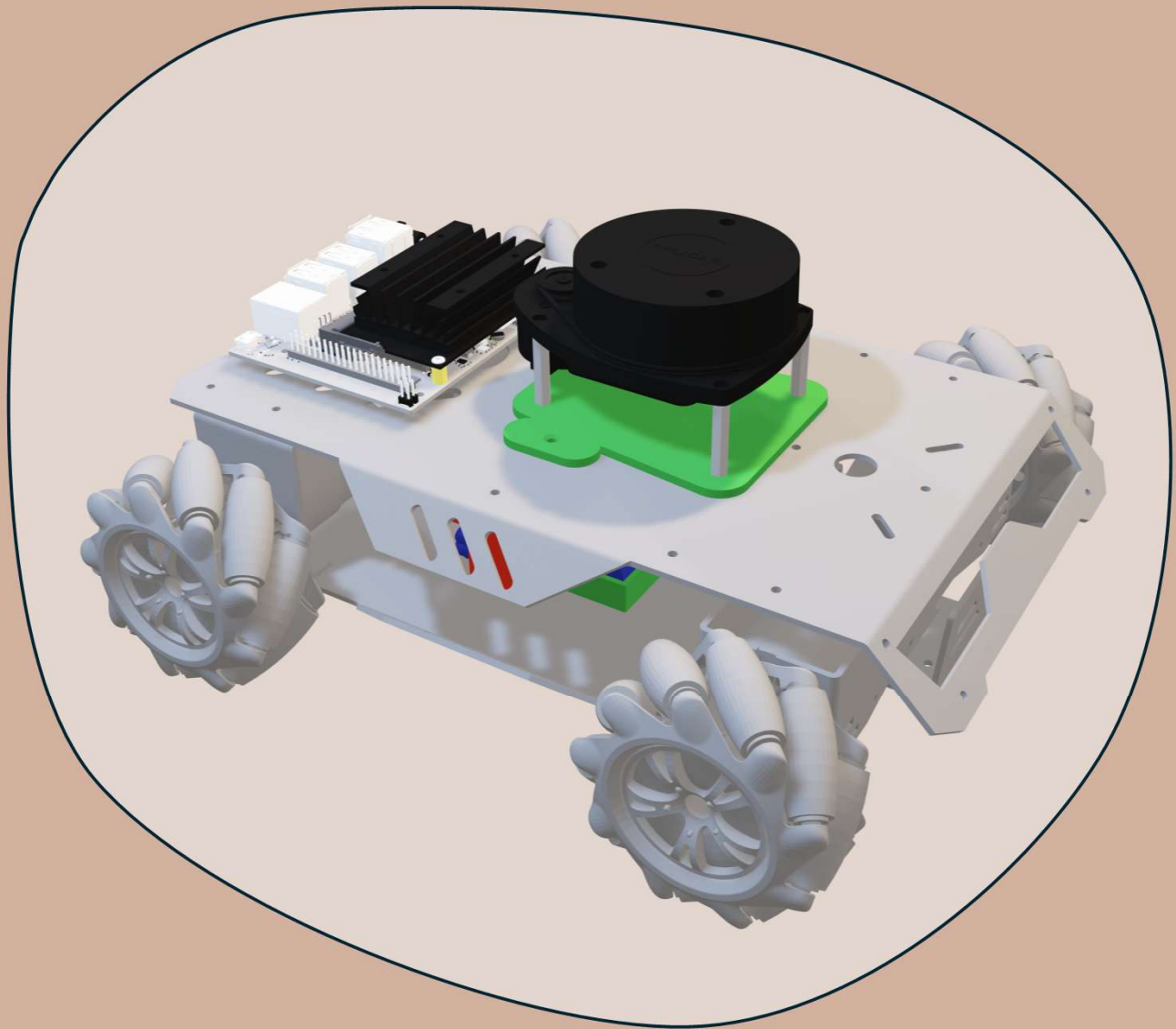


Mabop



Mabop

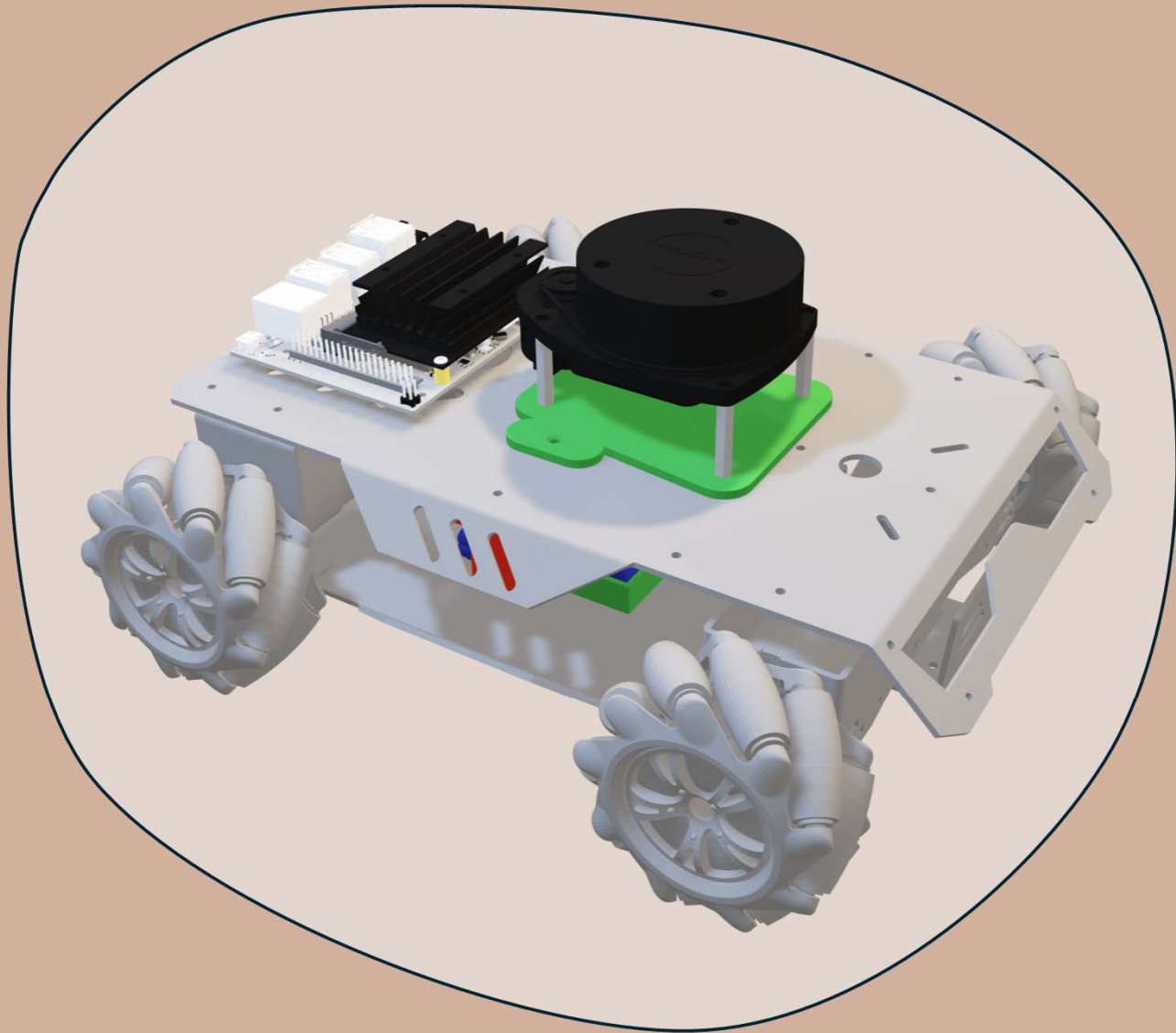
Le robot cartographe d'intérieur.

Objectifs:

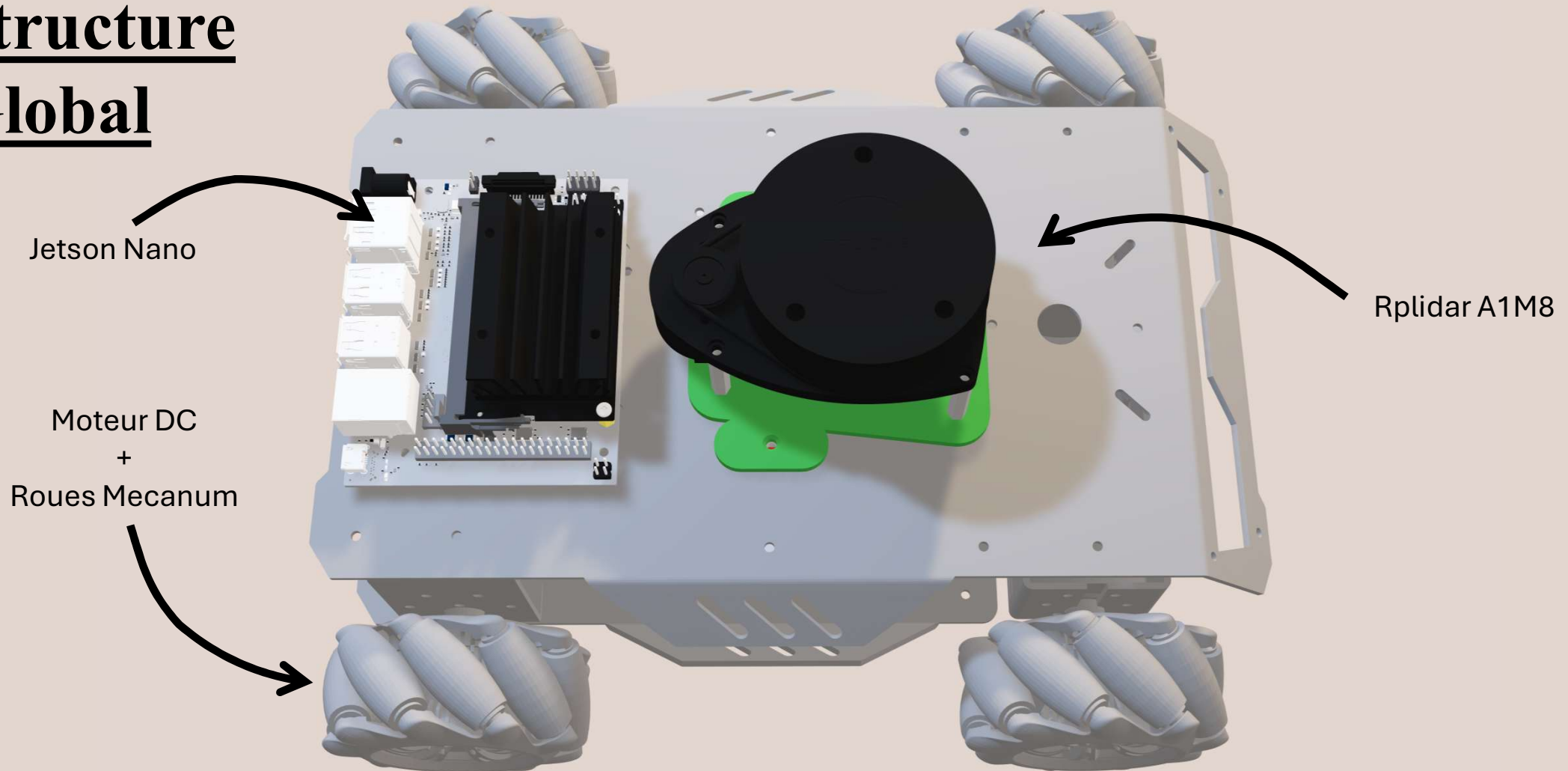
- Cartographier en 2D
- Déplacement Omnidirectionnel
- Mode autonome
- Mode Manuel

Applications:

- Cartographie d'entrepôt
- Repérage d'obstacle



Structure Global



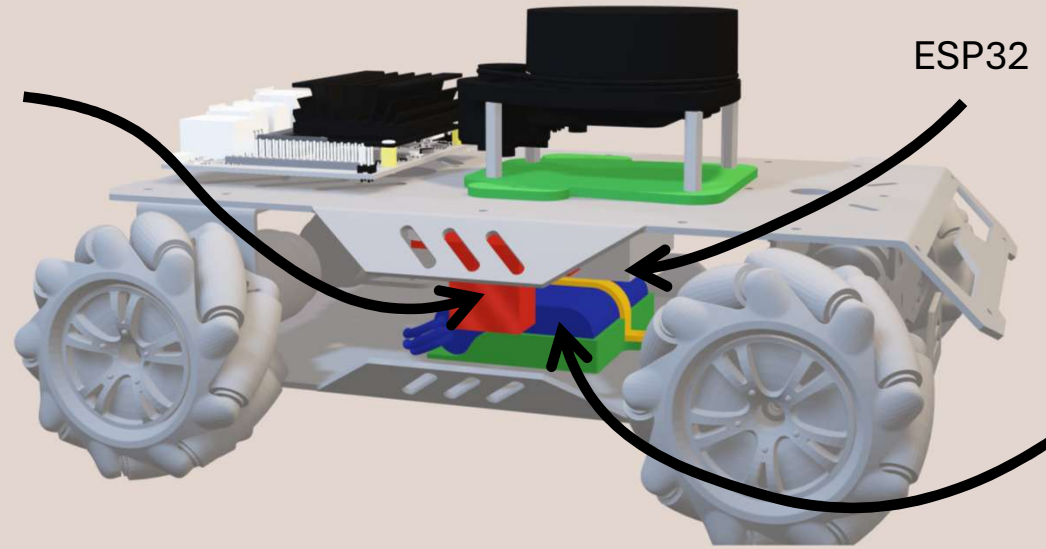
Structure

Global

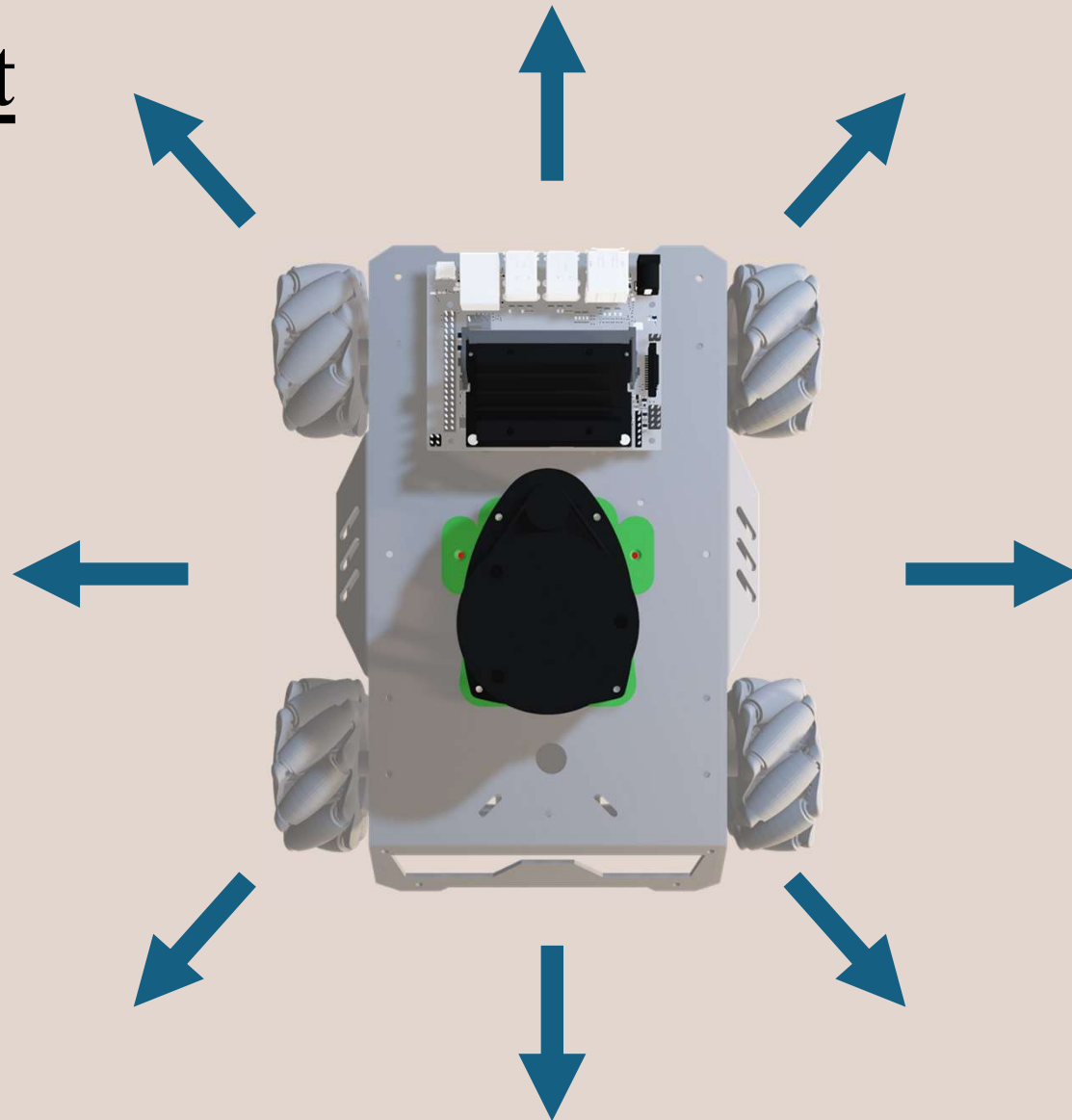
Driver Moteur

ESP32

Batterie 12V
2000mAh



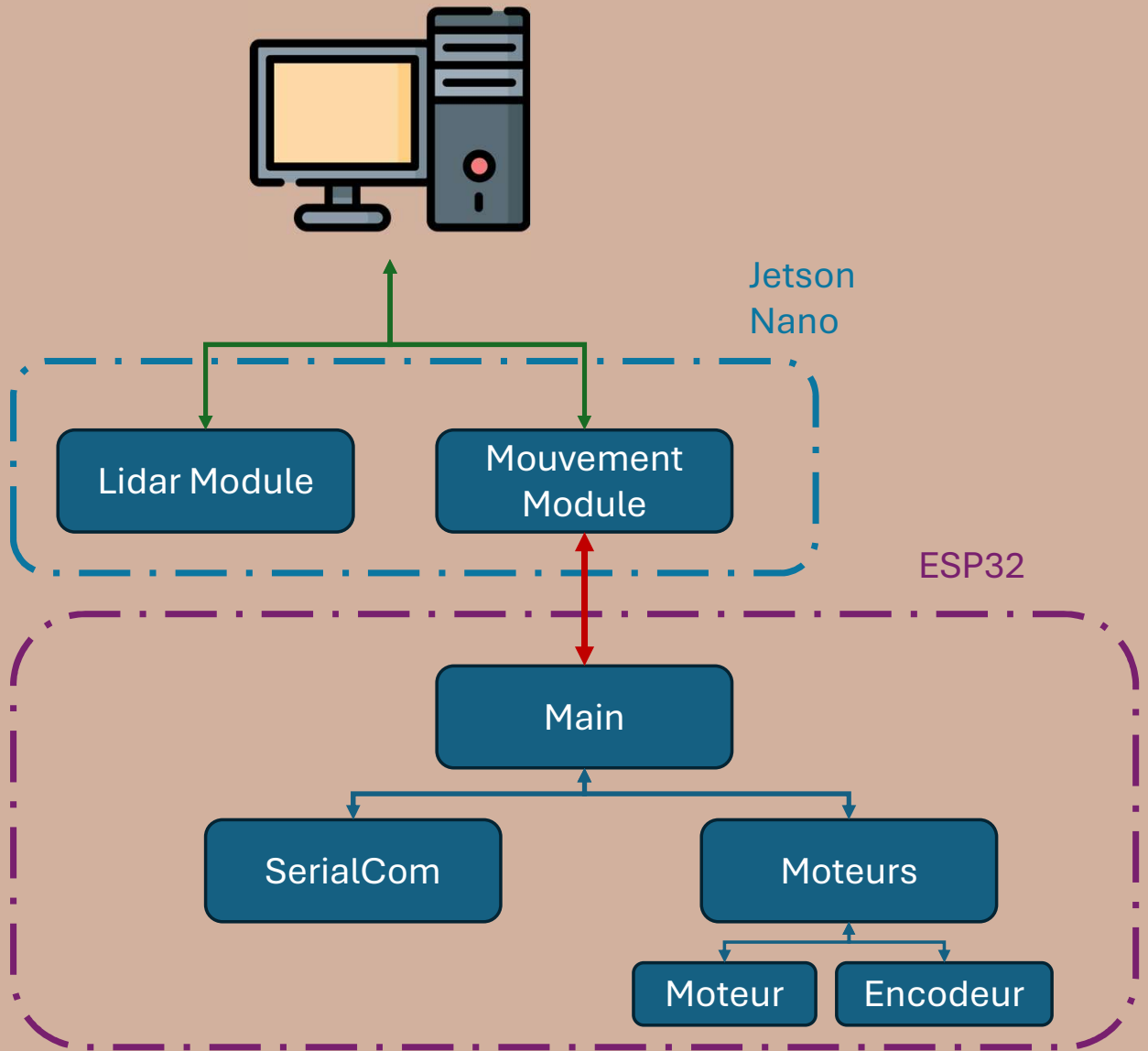
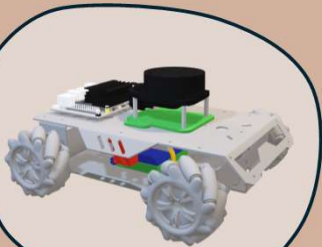
Déplacement



Architecture Code

↔ Connection ssh

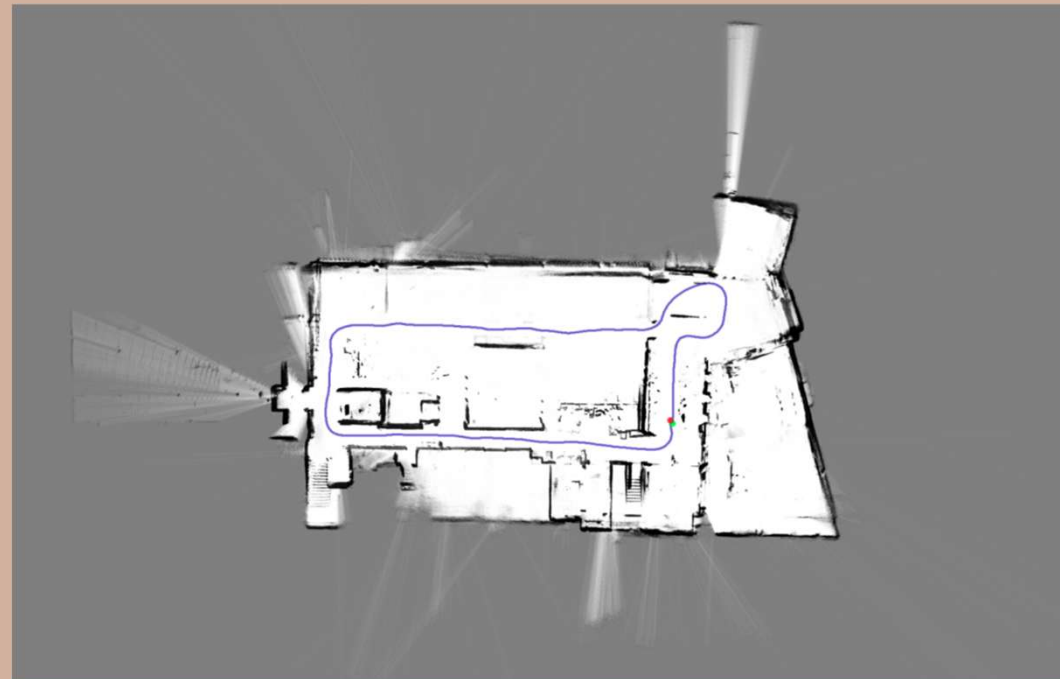
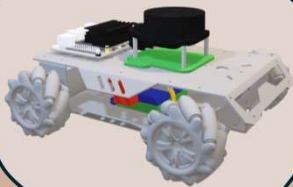
↔ Communication Série



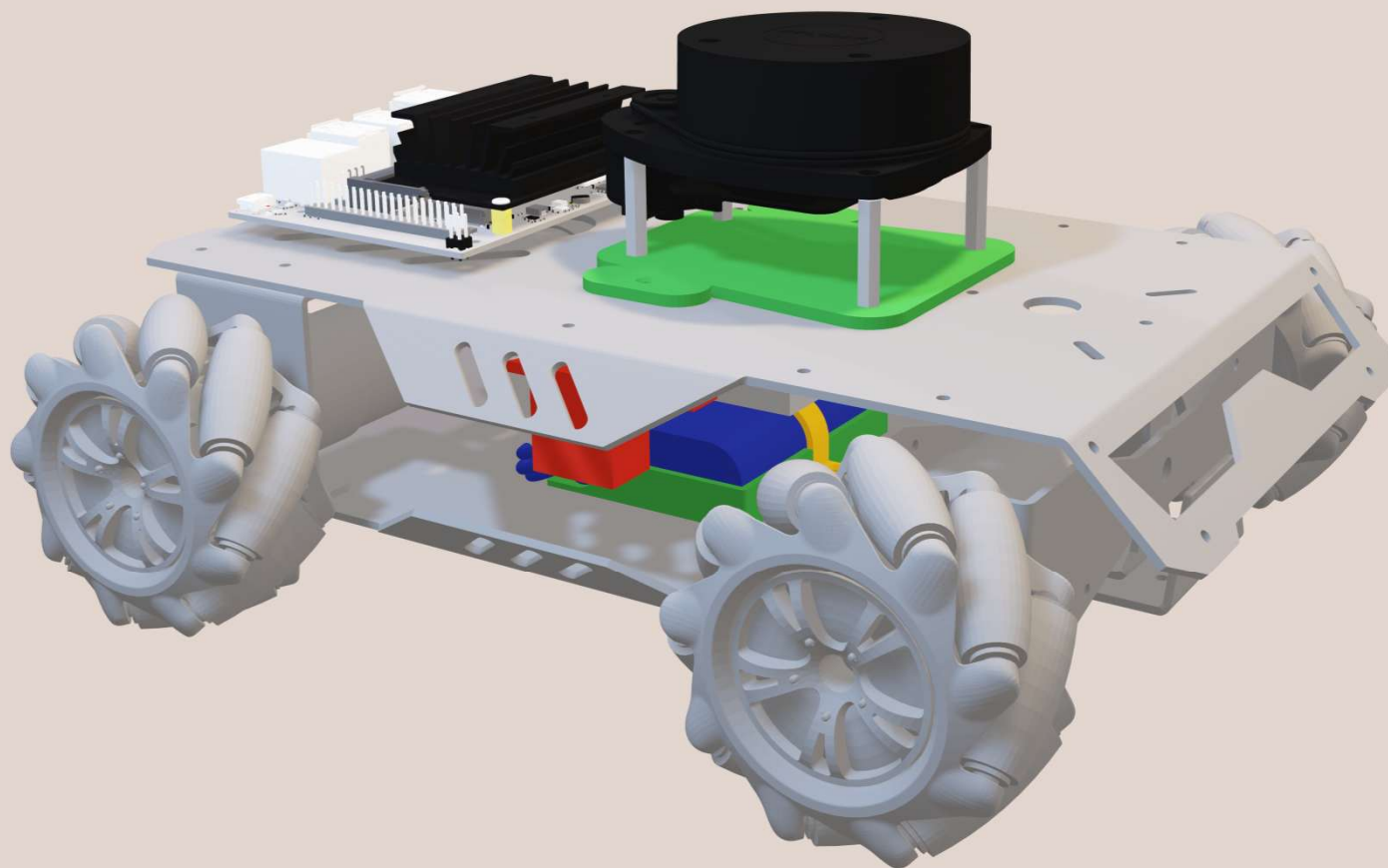
Système de Cartographie

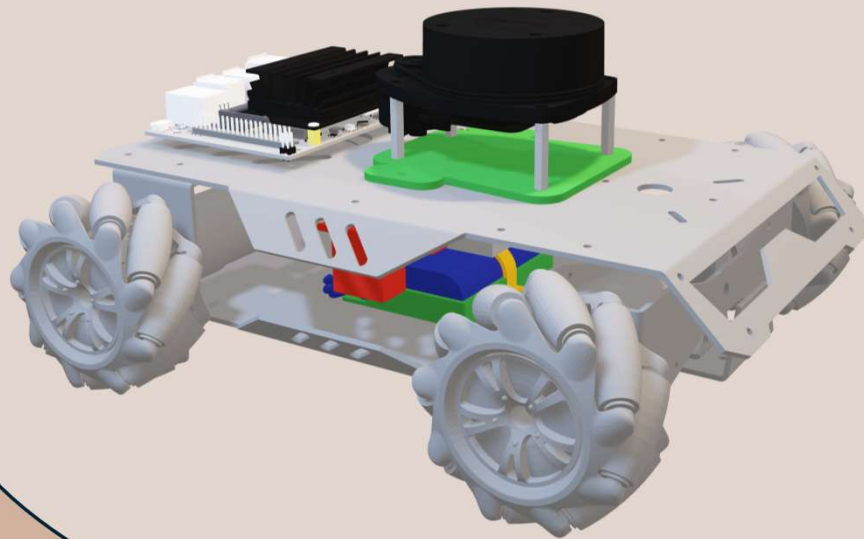
Algorithme SLAM (Simultaneous Localisation and mapping)

- Génère une carte avec la trajectoire du robot
- Sans odométrie
- Drift



Démonstration:





Conclusion

- Prototype
- Autonomie
- Fiabilisation des connections