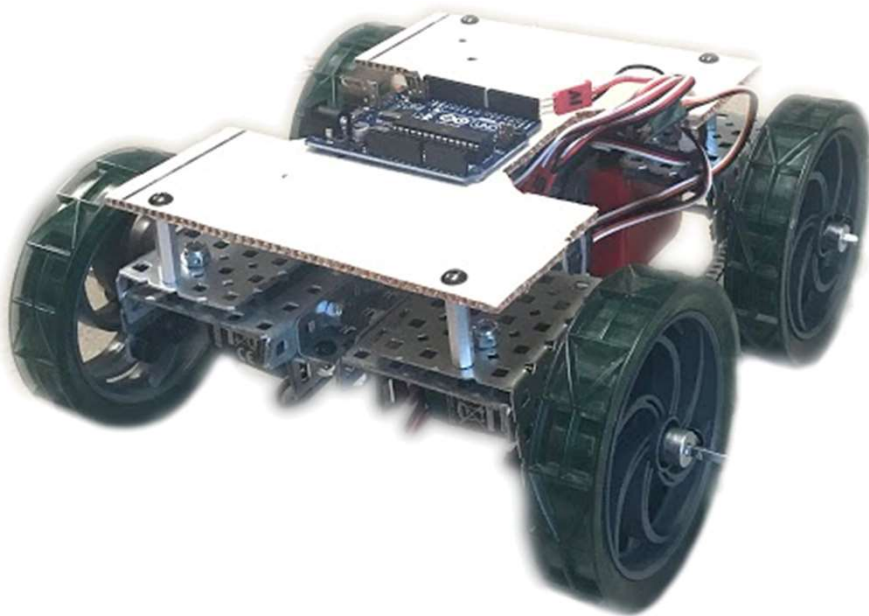
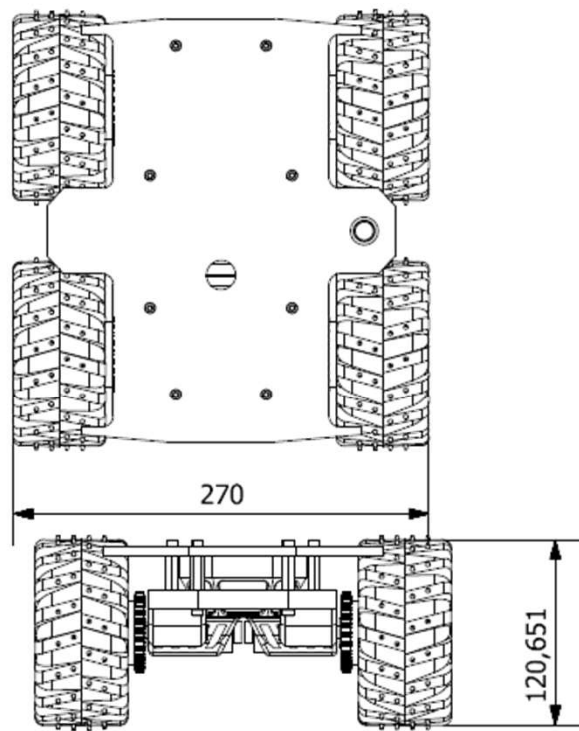


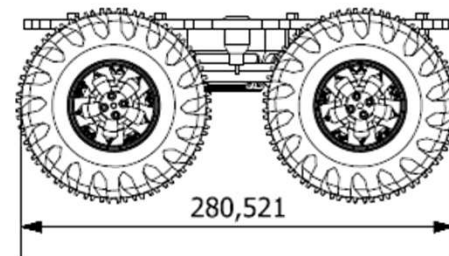
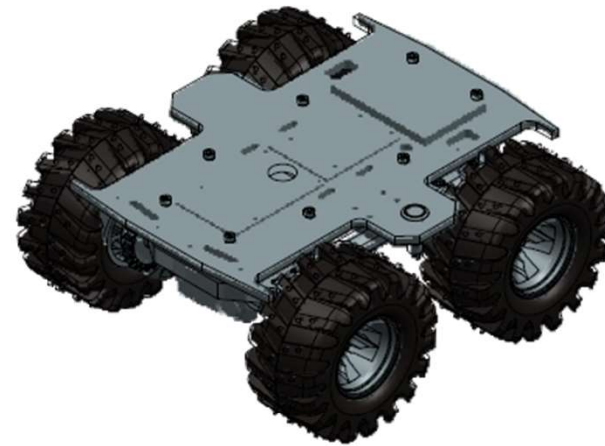
Vehicle Prototypes



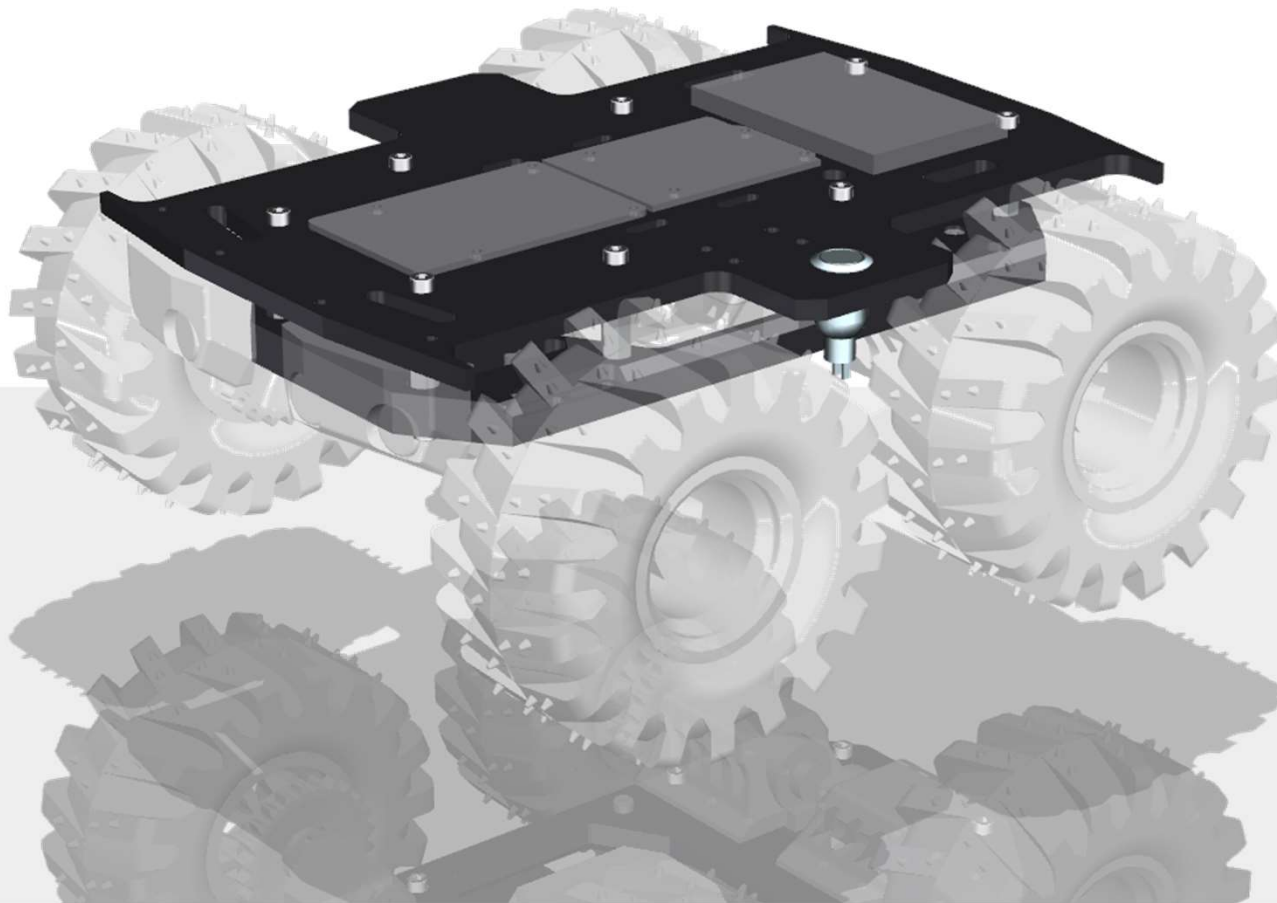
Preliminary Design Details



SCALE 1:4

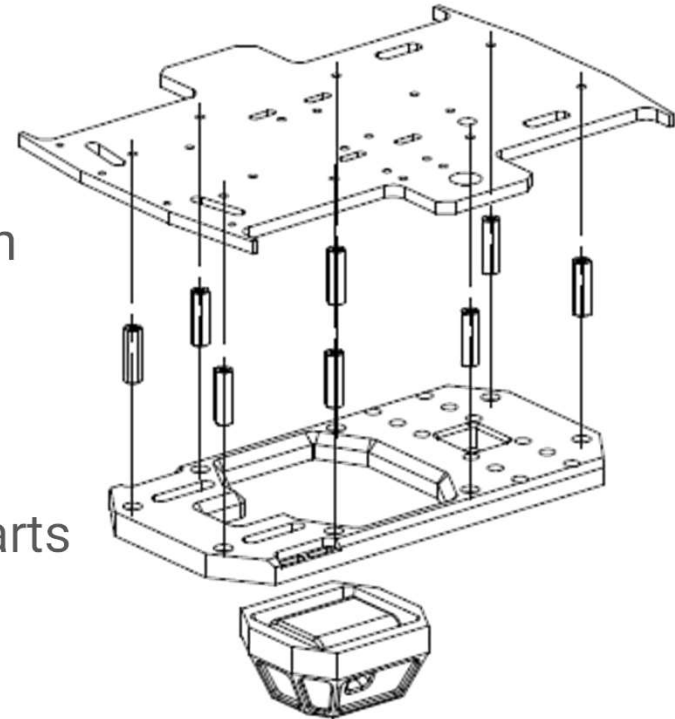


Structure



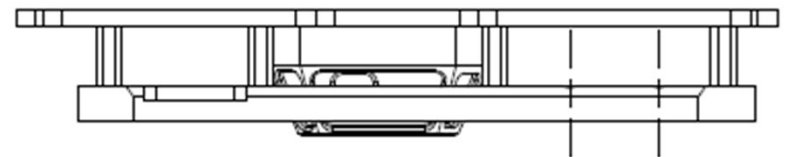
Structure

- Thick UHMW base-plate for chassis strength
- Easy removal of electronics
- Mounting slots for chain tensioning
- Access hole for battery replacement
- Use threaded inserts to mount 3D printed parts



Updates

- Add protective cover for electronics
- Battery holder mounting interface
- Find cheaper alternative to standoffs



Propulsion

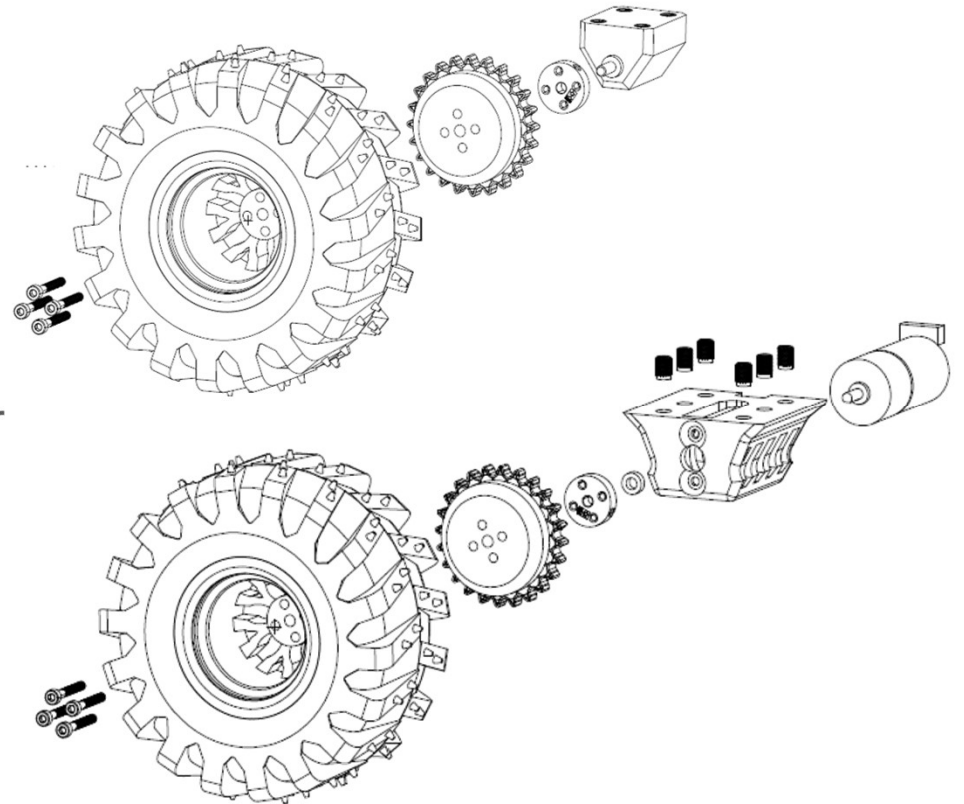


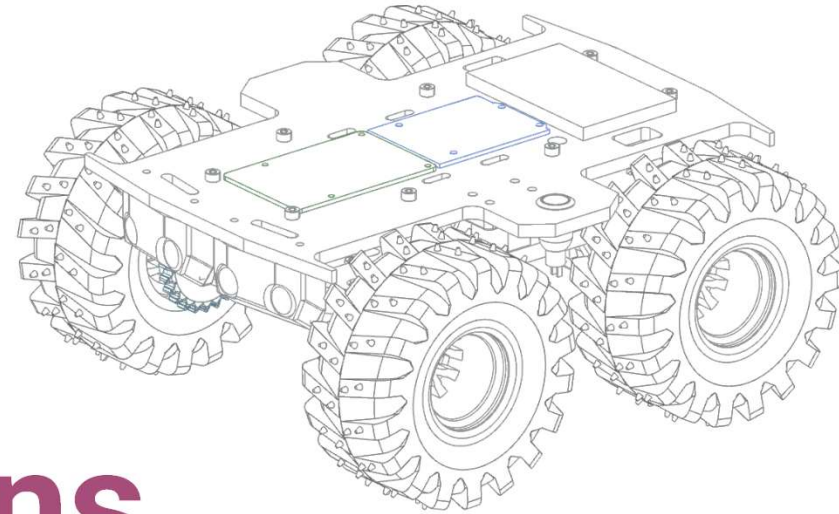
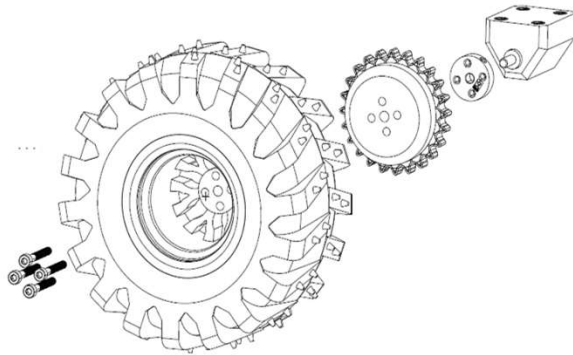
Propulsion

- Chain drive
- Max speed 1.5 m/s
- 120mm Dia. tires
- Predicted current draw - 0.79A / motor
- 36% of stall torque

Updates

- Source a higher torque motor
 - Failed to account for turning scrub
 - Rolling resistance calc was way off
- Tighten hole tolerances (slop)
- Chain works awesome!





Questions

