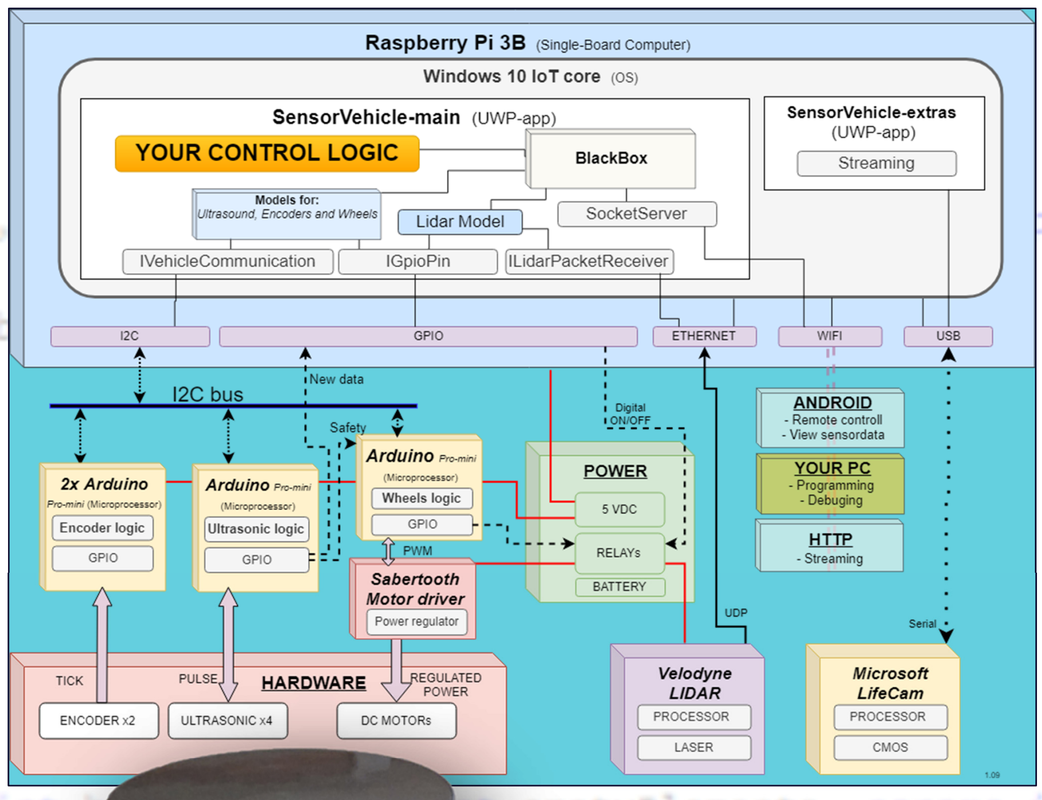
Robotbil

Engasjerende lærevektøy for automatiseringsstudenter

E15

Kravspesifikasjon:

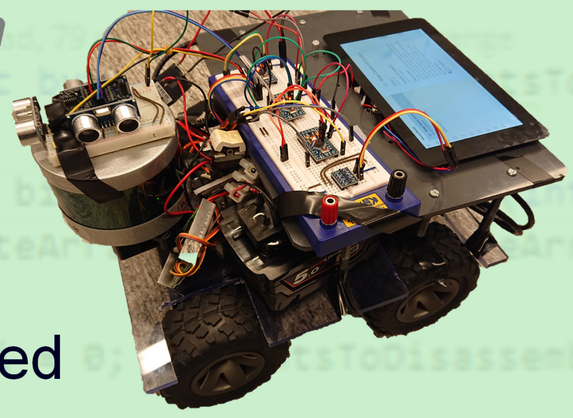
- ❑ Lage en sensorbil til bruk i undervisning og lab
- ❑ Enkelt å komme i gang med programmering
- ❑ Forskjellige sensorer
- ❑ Vise grunnleggende prinsipper med sensorer.
- ❑ Kontrollogikk skal kunne skrives med C#

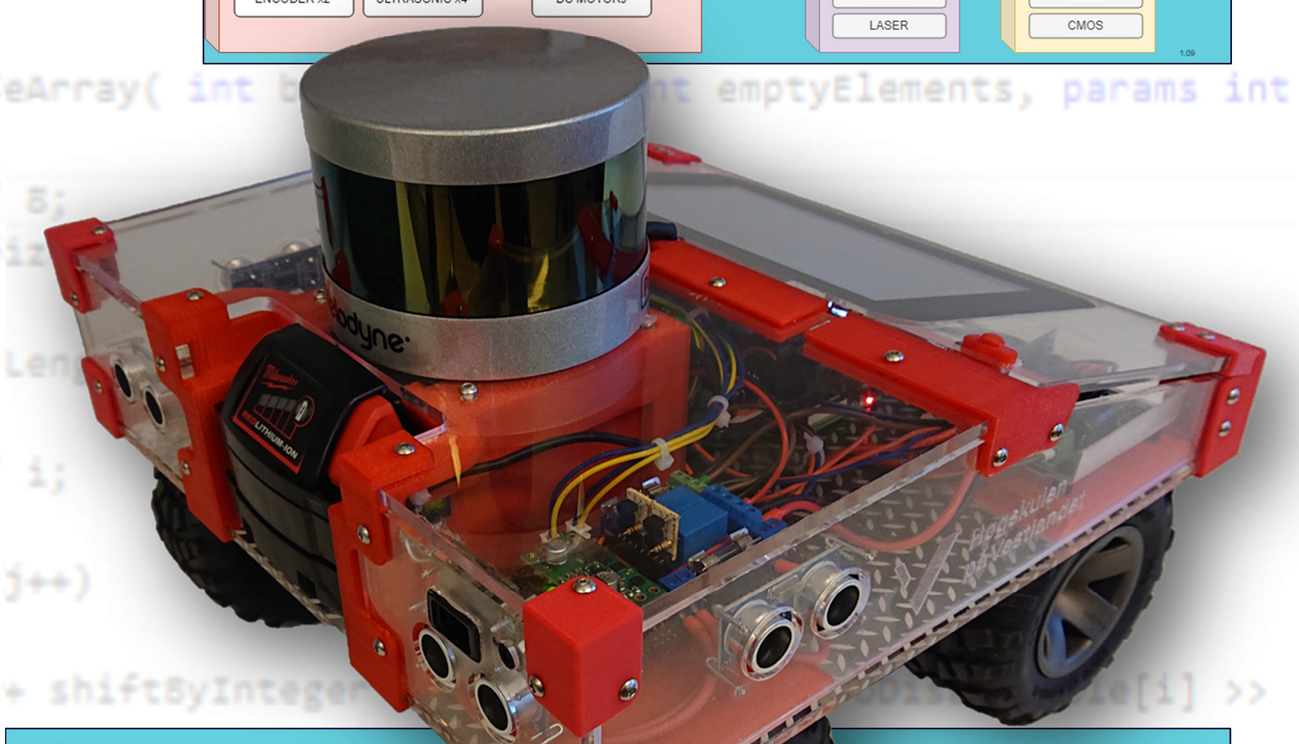


Prototype 1:

Funksjonsmodellen

- «Holdt sammen med tape»
- Softwareutvikling
- Teste software med hardware

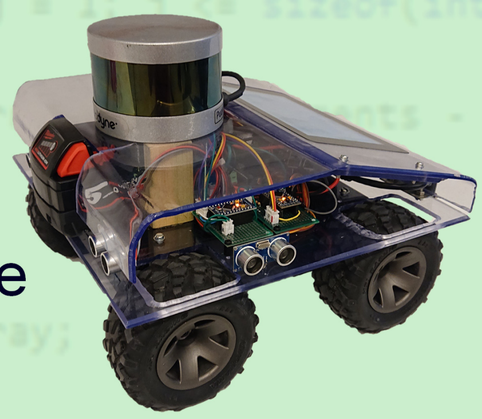




Prototype 2:

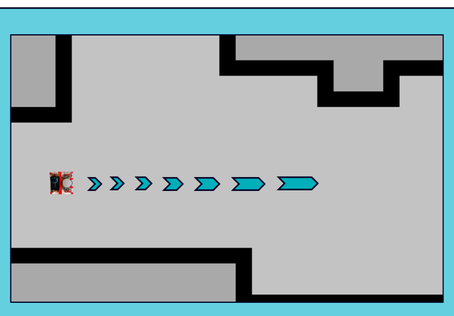
Utseendemodellen

- Solid karosseri
- Optimalisere software
- Loddet komponenter på kretskort



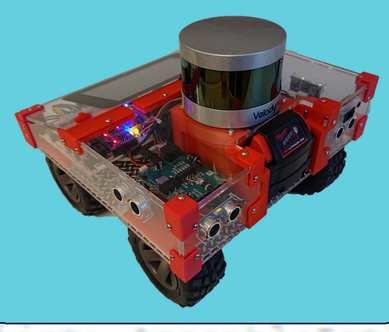
Din kode:

→ Local Machine



eller

→ Remote Machine



✓ Sensorer:

- Ultralyd
- Encoder
- Lidar
- Kamera

✓ Programmerbar med C#

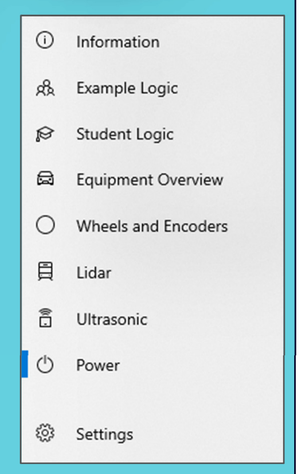
- Remote debugging

✓ Simulator

✓ 3D-printing og laserkutting

✓ Produktet består av:

- Egenproduserte kretskort
- C#, C++, Java Script
- Mer enn 20 000 kodelinjer! (GitHub)



Encoder

	Left	Right	
Total Distance:	0	0	[cm]
Total Duration:	00:00:00	00:00:00	
Last Distance:	0	0	[cm]
Last Duration:	0	0	[ms]
Avg. Velocity:	0.0	0.0	[cm/s]

Ultrasonic

Forward
0 0

Left 0 | Right 0

Last reading from sensors:
5/26/2019 1:24:40 PM

Høgskulen på Vestlandet

expo

Windows IoT