Master Stephen

choose evaluation

Problem statement:

- IoT remote areas
- update // log "big" data

Use case:

- solar equipment

- M2M (data traffic)

Remote Farm // Smart Farming

① - use case // challenges

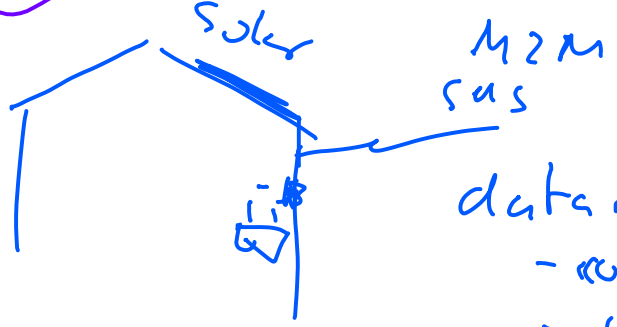
② - requirements

Raspberry Pi

Mesh

edge processing

(A) use case



data rate
- cost
- ~~limit~~ capacity

Use case: - log
- SW update

③ analysis / eval on technologies

3-5 alternatives
- techn.

Eval criteria
- cost
- data amount
- (edge processing answer)

(3)

	x^1	x^2	x^3
Tesla	+	0	-
⋮			
Lemon			
⋮			
⋮			

My basis for R&D proof elaborate

(1) (A) USE CASE

Smart Farming

- collection of data — soil
  - humidity
  - temperature
  - fertilizer
  - meteorological

robot
- high res camera
- multispectral camera

- in developing economies
  - answering the challenges of climate change

(A2) solar powered

irrigation
water pump
tank
distribution
"methodology"
plant need
people education

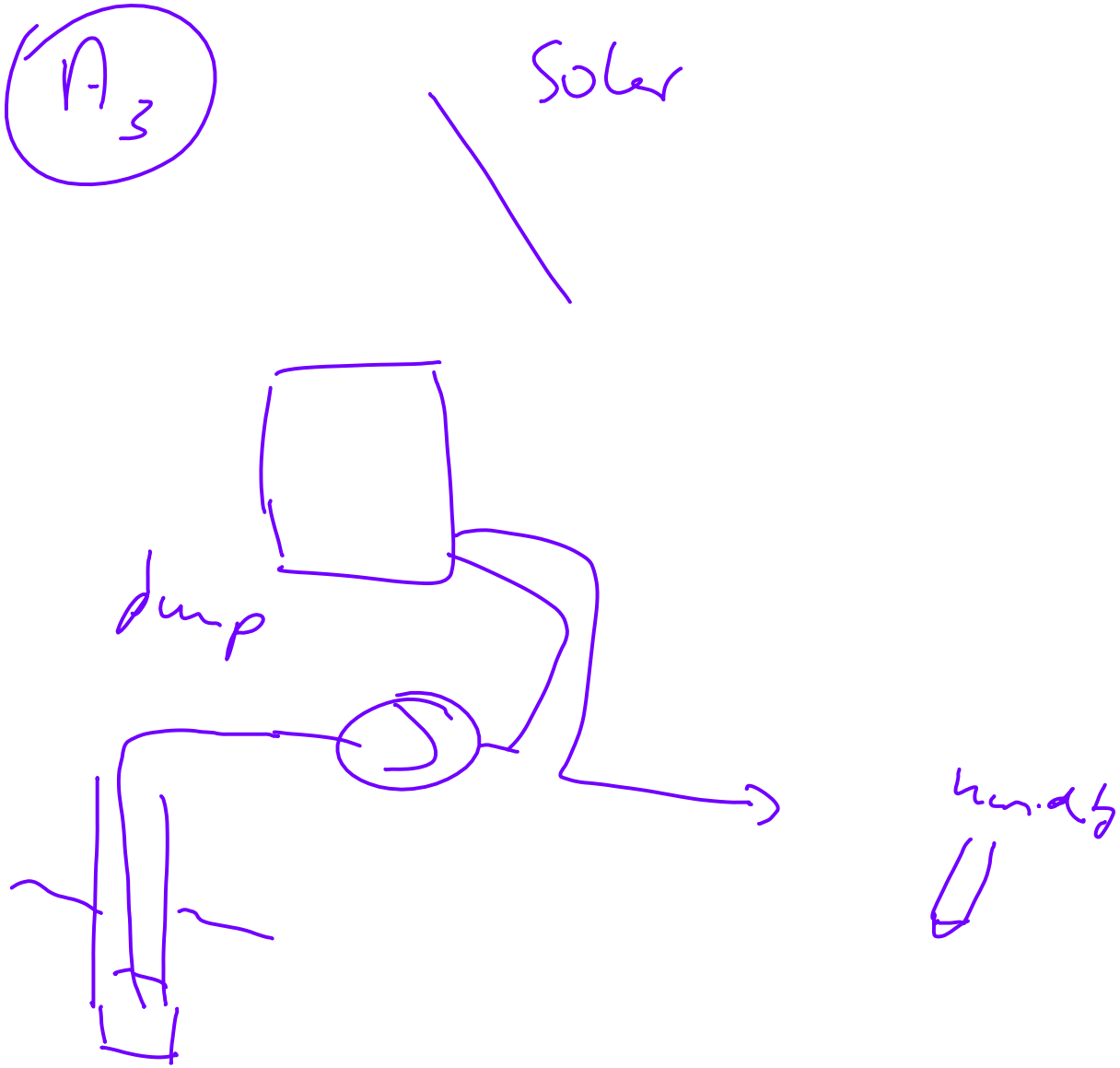
Goal:

data collection
data evaluation
meas. equipment
  └ solar intensity
  └ humidity

} ⟹ backend

NCA
TZ ~ 10 water tanks

Specific ⟸
tracking video
prediction


Solar
dump