

# Ed Kuipers

Biologist/biochemist

Environmental scientist (GO's/NGO's)

Software developer/QA manager (Freelance)

Photographer/Panorama and VR photographer

Socialist

Philosophical target: Community assisted manufacturing versus planned obsolescence and short product cycles

## Ed Kuipers objectives

(Small scale production with high value gain but without the accompanying price tag)

- Creating my own panorama hardware (open source platform Arduino Uno/Mega and 2 till 4 Big Easy Stepper controllers and dito steppers)
- Creating my own panorama software (sketch)

Advantages:

- Flexibility (open source hard- and software can be user adapted to my or any one elses needs, e.g. timelaps)
- Cost cutting (reducing price from 3000 euro to around 1500 euro)
- Marketable hardware meets open source and free software

## Uses for 3D printing/milling

- Fast prototyping for assembly:
  - Cutting development costs
  - Cutting development time
  - Increasing development flexibility
- Means for manufacturing independently:
  - For small series 3D printing and small scale 3 axis 3D milling can be used to produce to market without huge investment
- Cheap way to a professional motorized panoramahead for commercial use for me and others