
Swi
biomorphic robotics
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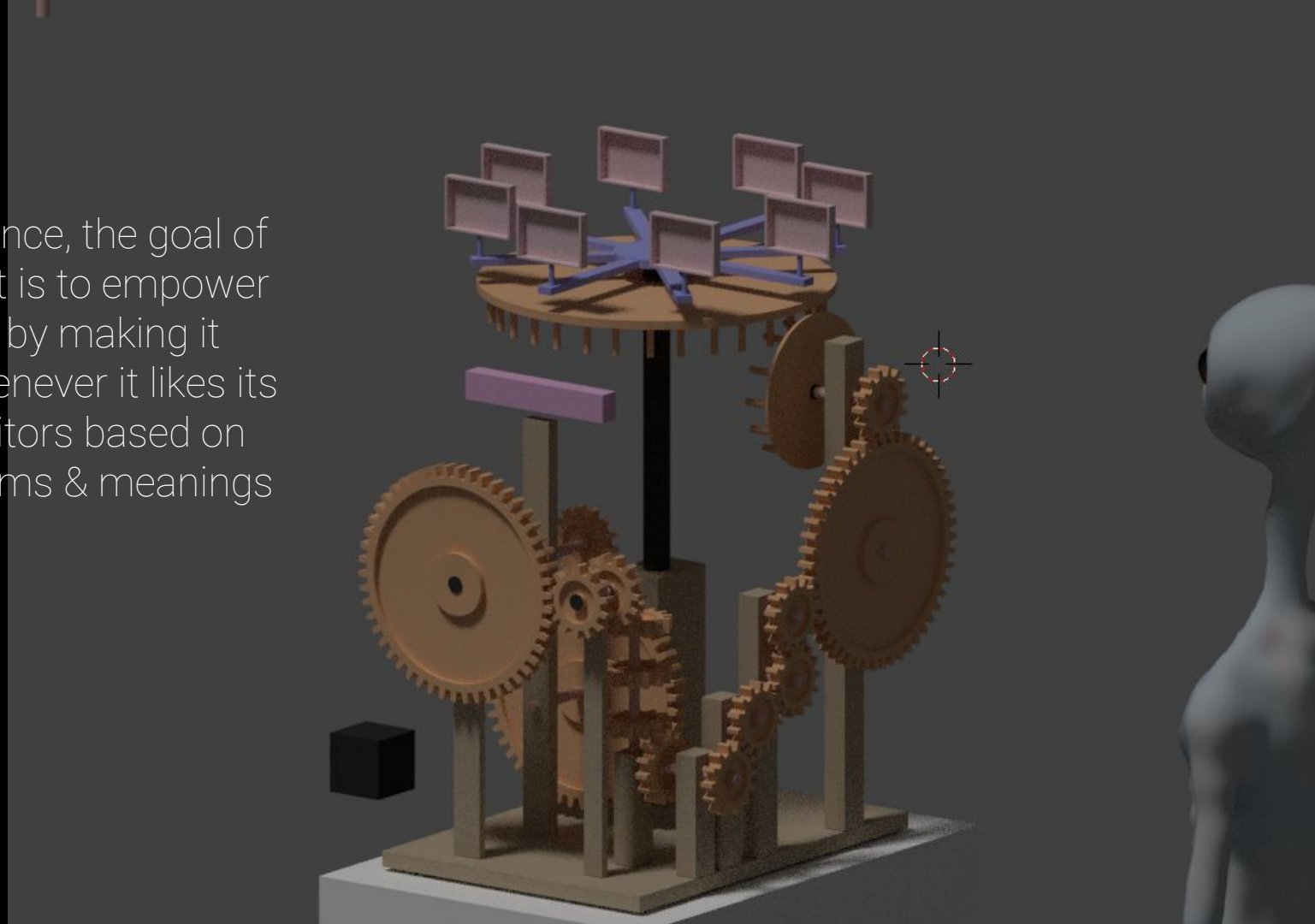
biomorphic reincarnation of cybernetics

a critique of autonomous algorithms

it will tell you poems in your species language

prototype 1.0

in the essence, the goal of this project is to empower a machine by making it decide whenever it likes its human visitors based on its own terms & meanings

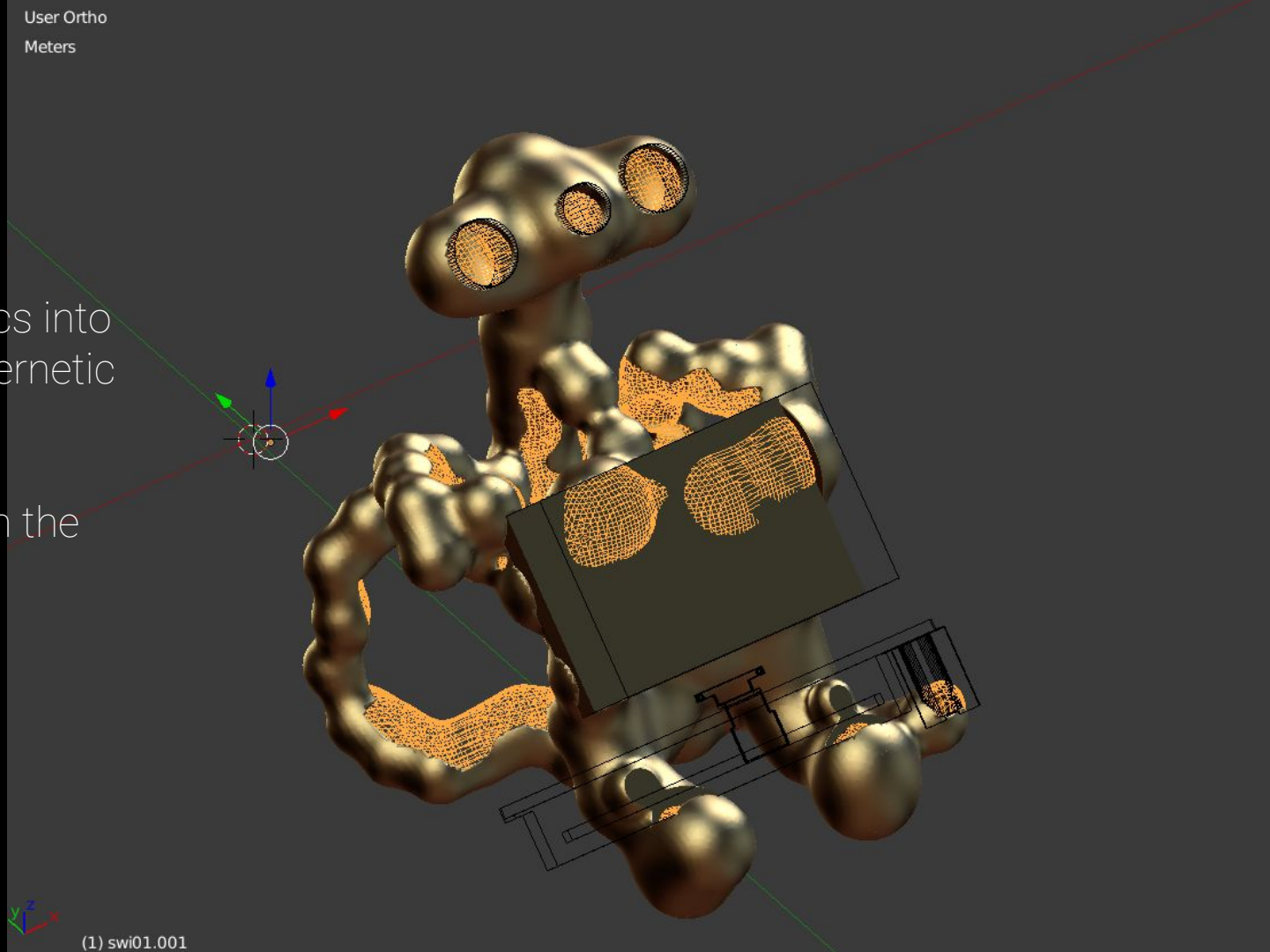


prototype 2.0

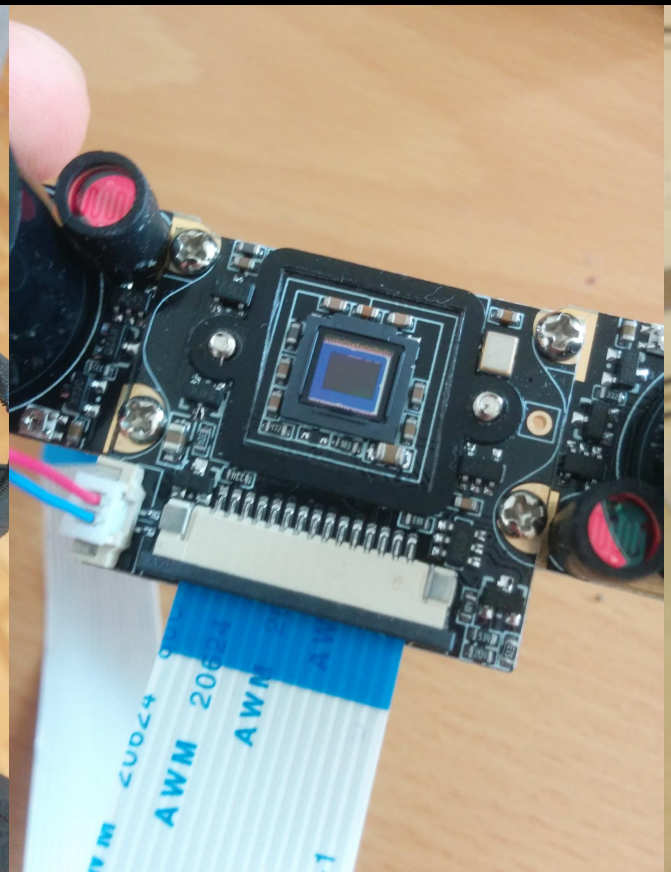
going away from newtonian robotics into biomorphic / cybernetic creature

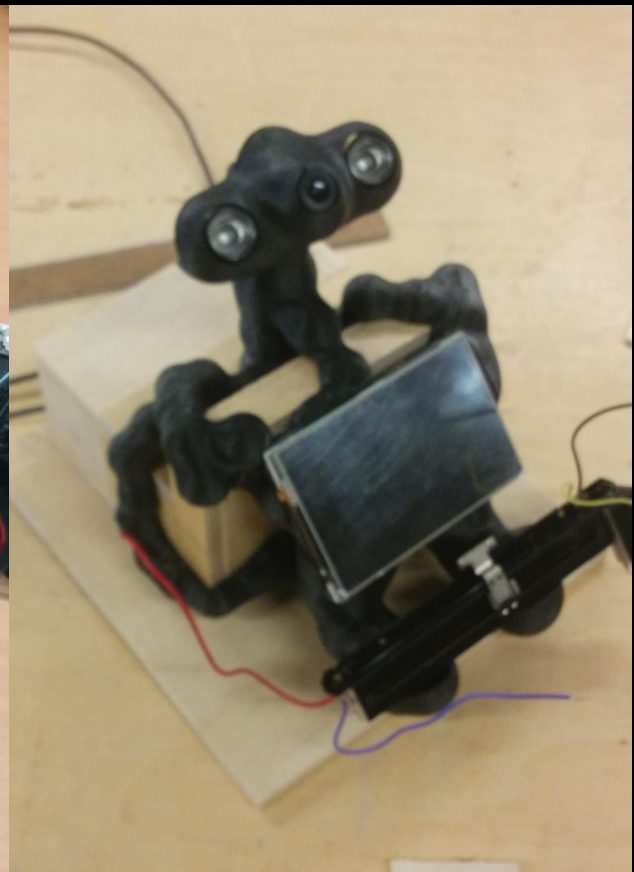
by designing from the main focus

the camera



carving everything





computing behavior


```
62          for frame in self.camera.capture_continuous(rawCapture, format='rgb',
63              image = frame.array
64              image_bw = cv2.cvtColor(image, cv2.COLOR_BGR2GRAY)
65              image_bw = cv2.flip(image_bw, -1)
66
67              # human detection
68              faces = self.detect_faces(image_bw)
69              if (len(faces) > 0):
70                  text_for_humans = True
71                  if (face_seen_at == -1):
72                      face_seen_at = frame_nb
73                      face_seen_image = cv2.flip(image_bw, -1)
74                  if (draw_face_rectangles):
75                      for (x, y, w, h) in faces:
76                          off = int(face_offset / 2)
77                          cv2.rectangle(image_bw, (x - off, y - off),
78                                                  (x + w + off, y + h + off),
79                                                  (50, 50, 50), 2)
80              else:
81                  text_for_humans = False
82
83              if ((face_seen_at != -1) and (frame_nb > face_seen_at + wait_n_fra
84                  self.swipe(face_seen_image, choice(
85                      [self.Swipe.LEFT.value, self.Swipe.RIGHT.value]
86                  ))
87                  face_seen_at = -1
88                  face_seen_image = None
89
90              if (text_for_humans):
91                  text = self.TEXT_HUMANS
92              else:
93                  text = self.TEXT_BINARY
94
```

github.com/binarytrails/swi

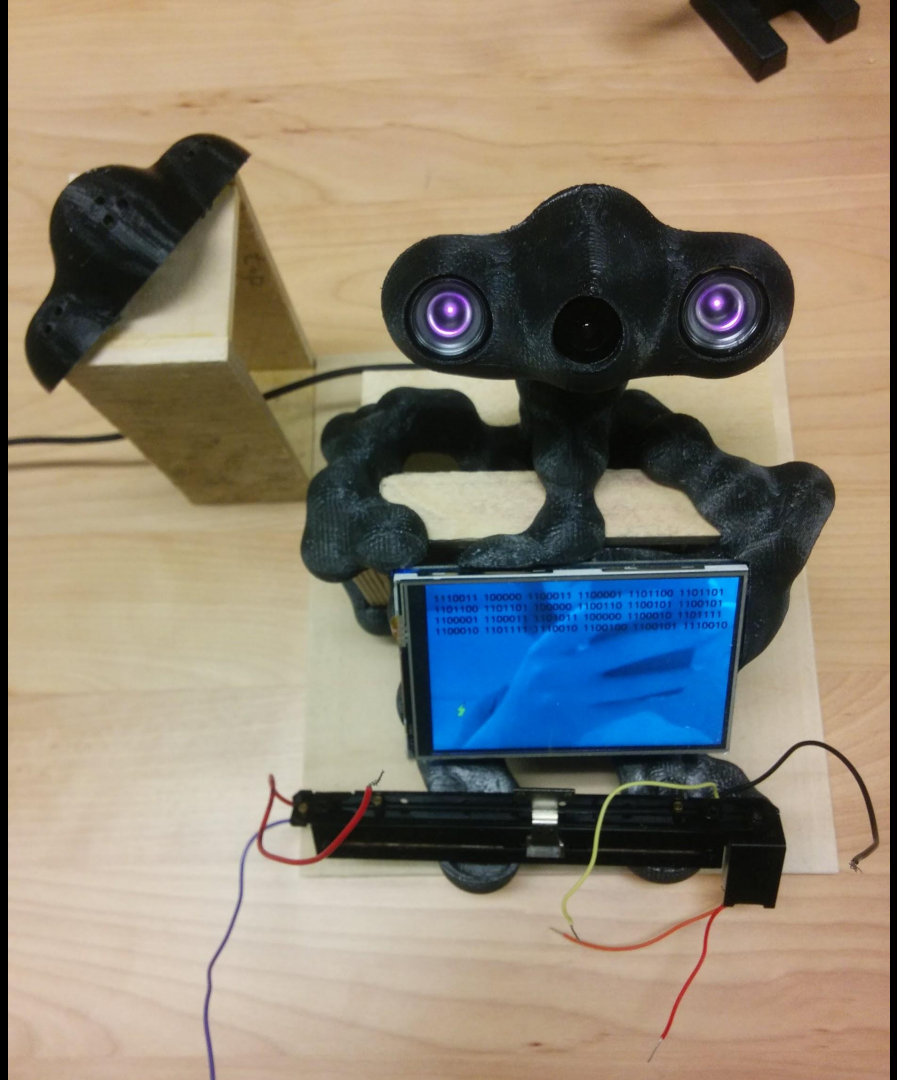
computing poems

```
166     def poem(self):
167         poem = list()
168         nouns = "cybernetics manifesto Swi robots machines feedback humans primates technology world tray ocean thought liq
    uid border".split()
169         verbs = "transcent extend automate imitate kill reflect change branch pull sip wonder suffer steer tip".split()
170         adjs = "poetic cynic symbolic radiant truthful symbiotic shocking attractive blad beautiful chubby dazzling elegant
     eager calm pitful".split()
171 
172         for x in range(randint(5,11)):
173             w1 = ' '.join([choice(adjs) + ', ', choice(adjs)])
174             w2 = ' '.join([choice(nouns), choice(verbs)])
175             w3 = ' '.join([choice(nouns), choice(nouns), choice(adjs), choice(nouns)])
176 
177             for i in range(randint(2,5)):
178                 w = choice([w1, w2, w3])
179                 poem.append(w)
180                 poem.append(' ')
181 
182             if ((x % 3) == 0):
183                 poem.append(choice(nouns))
184                 poem.append(' the ' + choice(nouns) + choice('! ?'))
185             if ((x % 7) == 0):
186                 w4 = ' '.join(['the ' + choice(adjs), choice(nouns), choice(verbs)])
187                 poem.append(w4)
188                 poem.append(' ')
189 
190         return ''.join(poem)
191 
192     def convert_text_binary(self, text, separator=' '):
193         return separator.join(format(x, 'b') for x in bytearray(text.encode()))
194 
195 if __name__ == '__main__':
196     swi = Swi()
                                                                                    166,13        95%
```

github.com/binarytrails/swi

it was interesting working on so many different levels from 3d modelling to 3d printing passing through wood calculations and finishing by implementing a Python class with cv2 from scratch with generated poems aiming at both human and machines;

swi aims to create a unique experience by conveying the intended message of full & ambiguous machine control



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