

Underwater Organism Detection Vehicle

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Content

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Background

underwater complex environment:

low temperature, dim vision, and high pressure

using underwater robots:

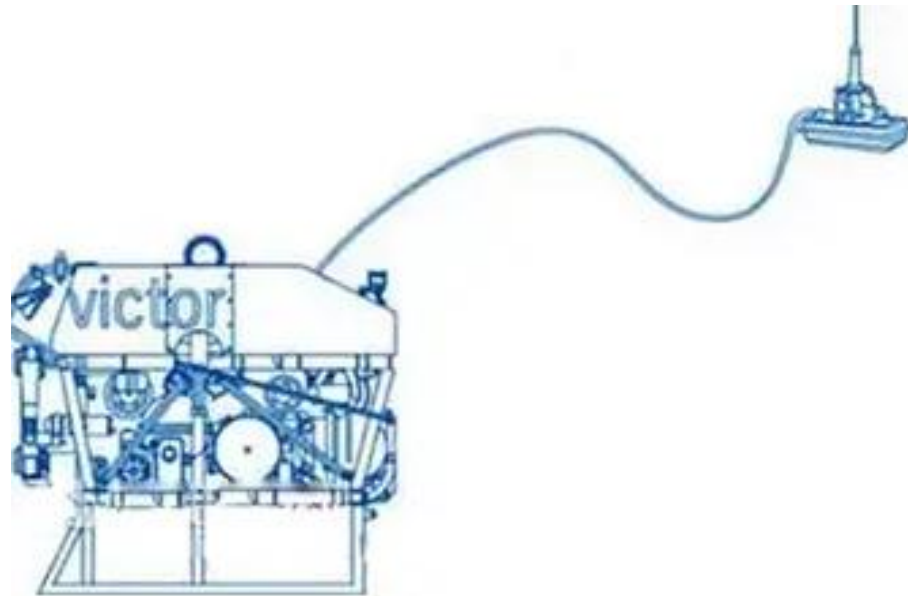
collecting the marine products

Background

core technique of making an underwater robot:

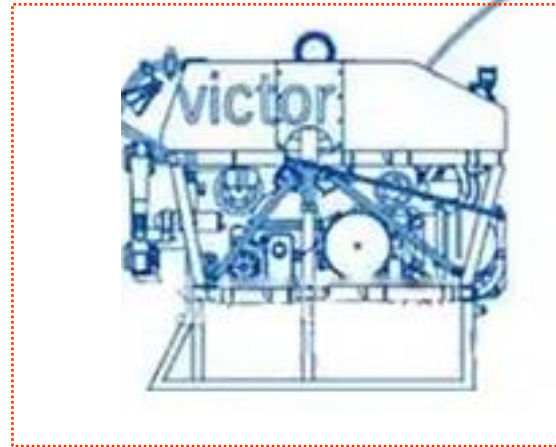
detect target from underwater vision

Background



Background

‘eyes’



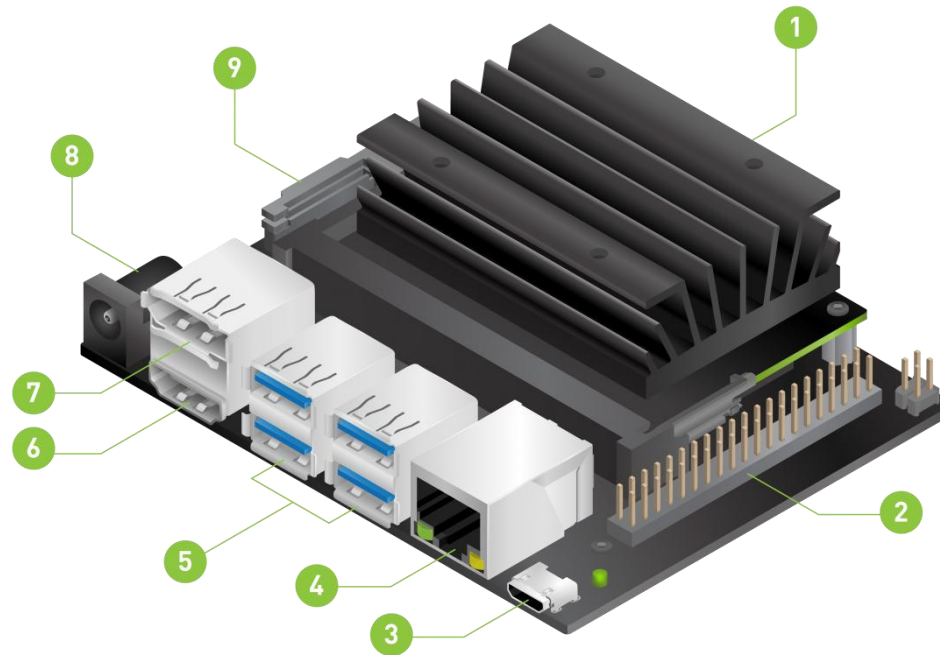
‘brain’



Work of This Week

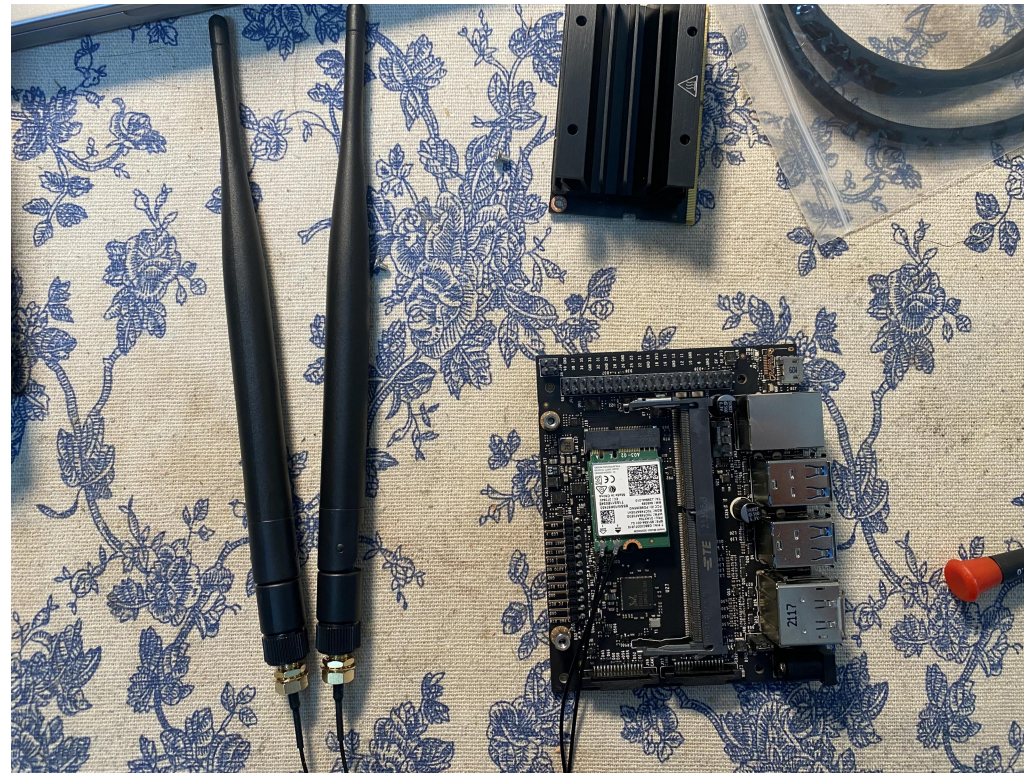


Work of This Week



Work of This Week

Remote communication



Work of This Week

Deploying

```
while True:
    ret, frame = cap.read()
    if not ret:
        break

    # Preprocess frame
    ori_imgs, framed_imgs, framed metas = preprocess(frame, max_size=512)
```

Work of This Week



Testing

Result



Future Works

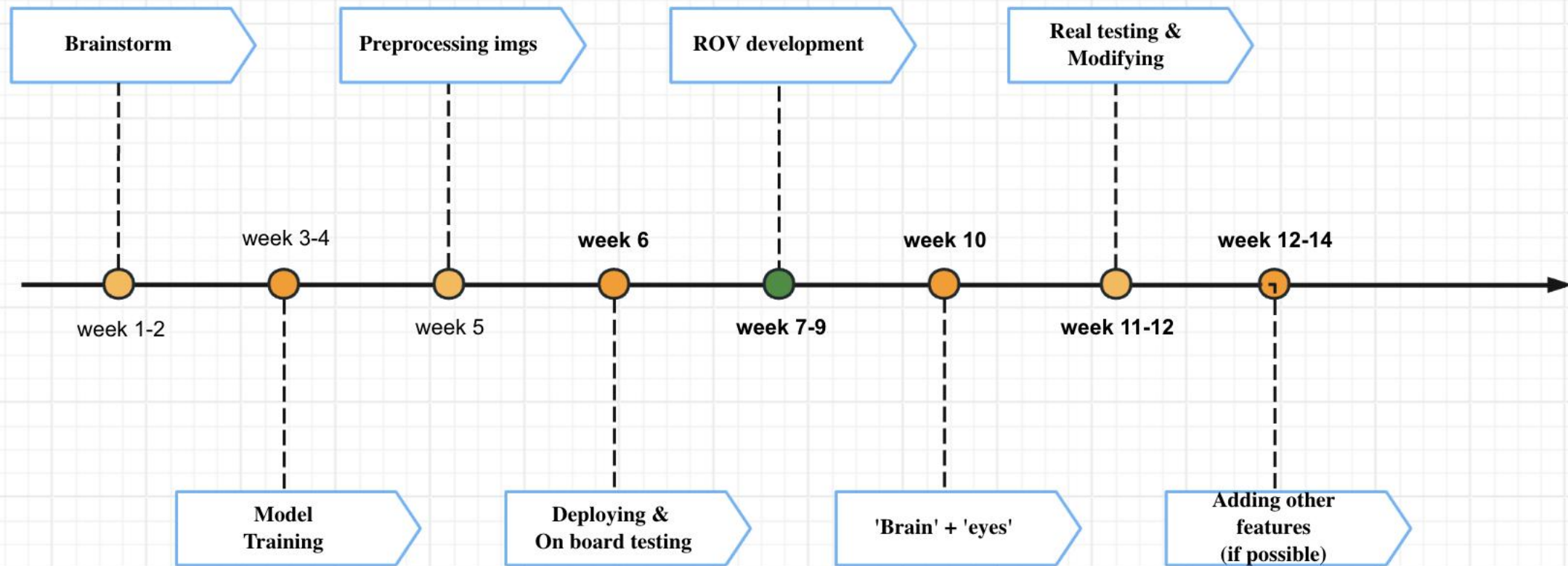
ROV(Remotely Operated Vehicle) development



Future Works

Do some real testing!

Timeline



Thank You!