SUSTech Southern University of Science and Technology

RayVision:

An Underwater Detection Vehicle

OCE210

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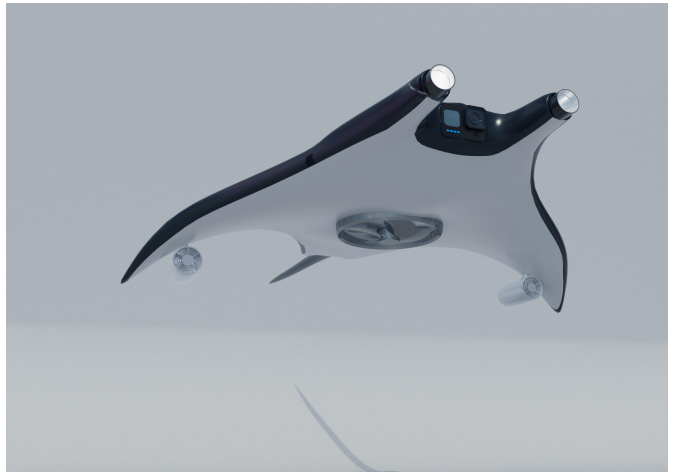

Website: [RayVision]

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Introduction

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underwater complex environment:

low temperature, dim vision, and high pressure

using underwater robots:

collecting the marine products

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Introduction

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Though there are a lot of advanced ROVs nowadays,

they can only provide us with raw data.

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Introduction

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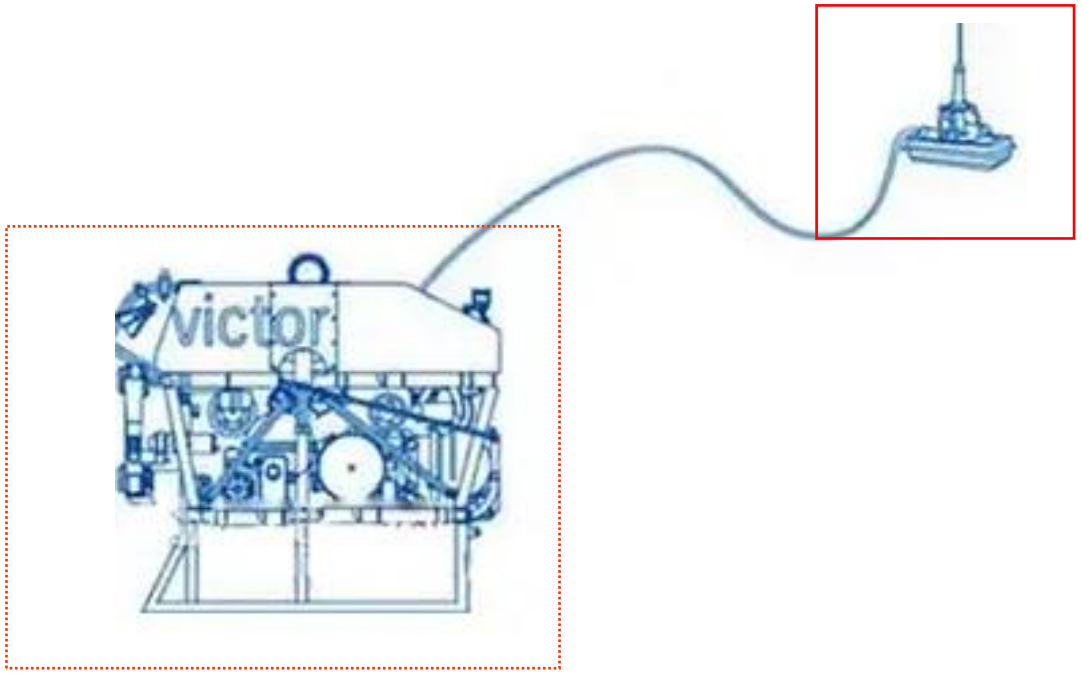
‘brain’

‘eyes’



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Introduction

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Marine Biology Research: researchers can gain a more accurate statistics of marine ecosystems' structure and dynamics in an efficient way.

Aquaculture: In aquaculture, target recognition technology can monitor the health and number of farmed fish, optimizing management and production efficiency.

National Defense and Security: In defense, underwater target recognition is used to detect and identify submarines, mines, and other potential threats.

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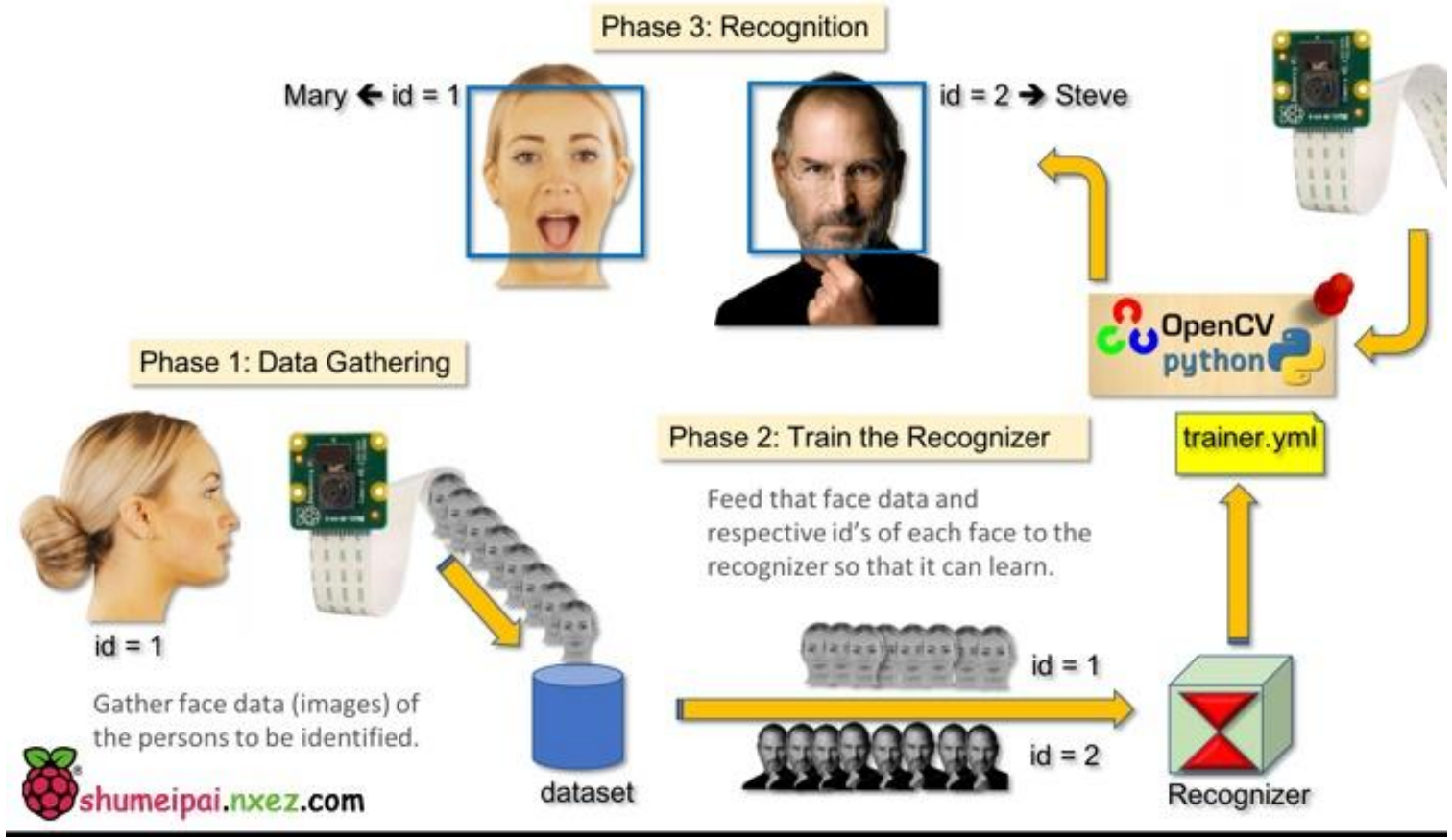
Software

Object Detection



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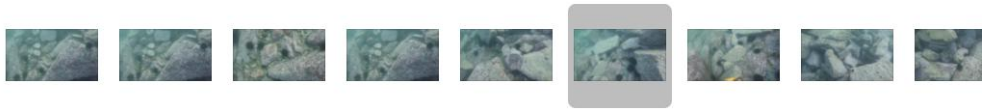
Software

Preparing dataset



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Software

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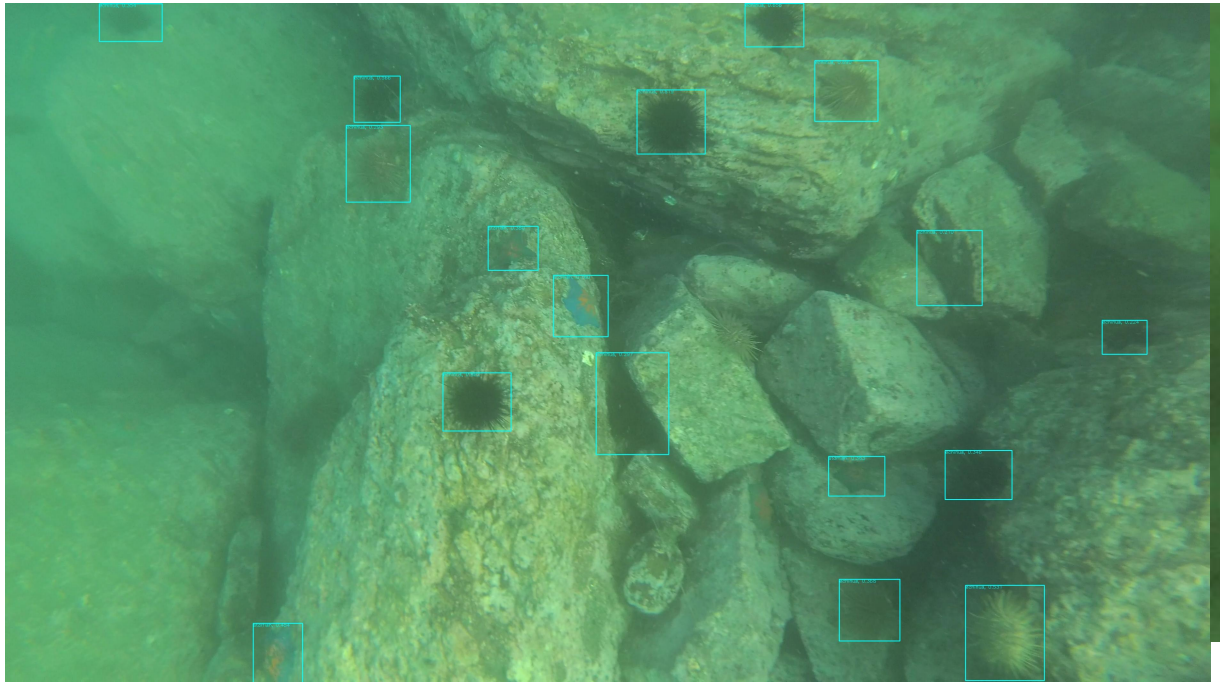
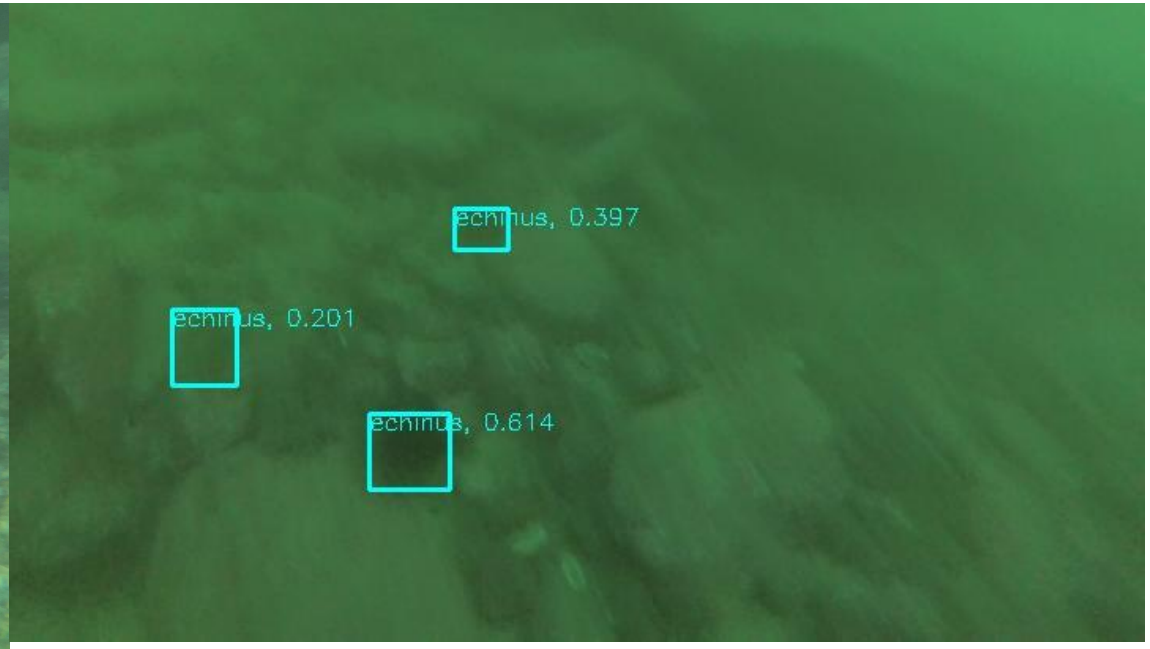
Result





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Result

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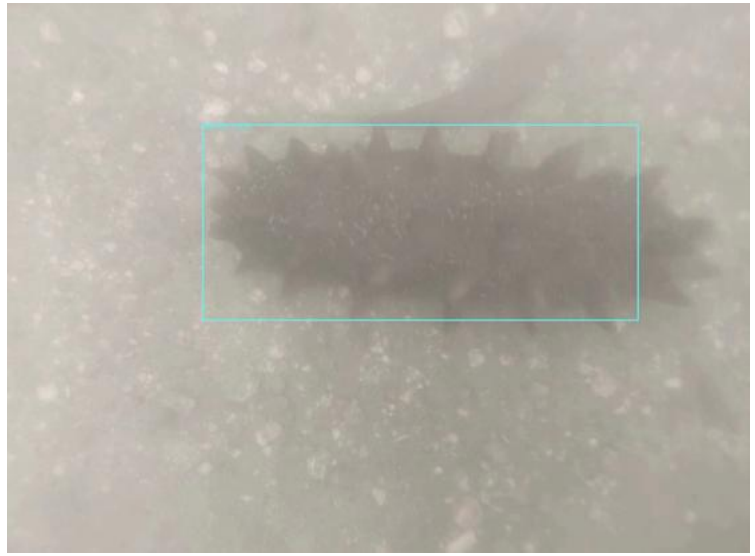
Software

Result

Software

Result



Software

Result

Software

Result

Timeline

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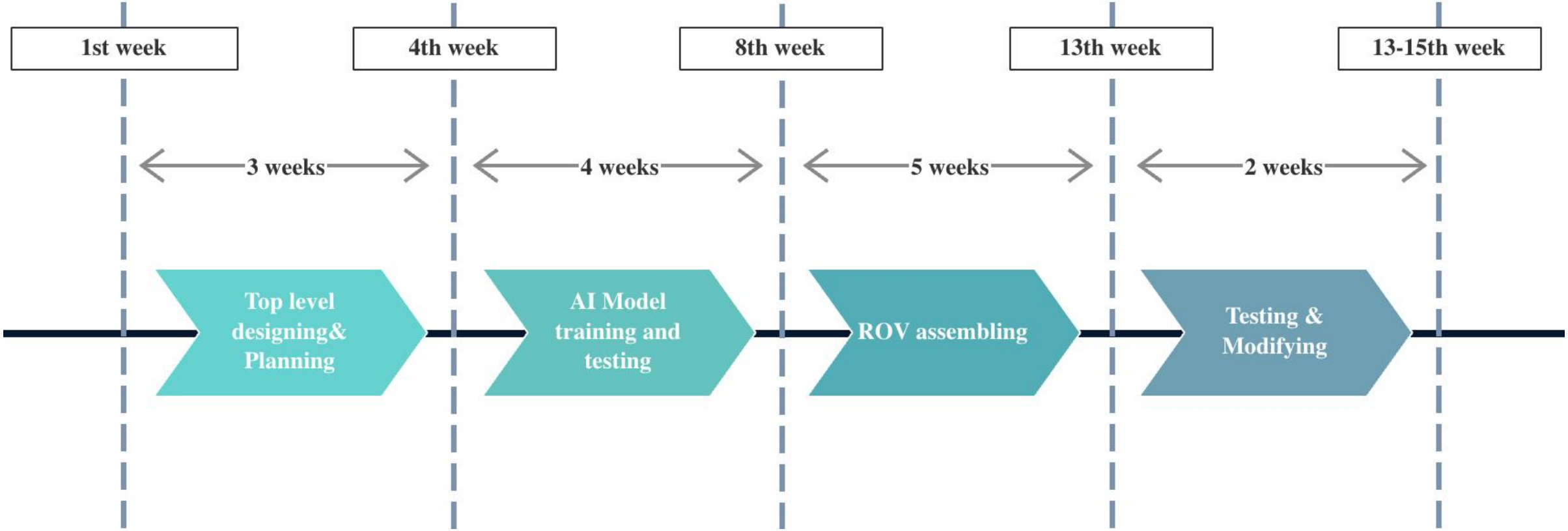

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Thank You!

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