# HCAUV: A Tri-Cabin AUV with Numerical Models and Robust Control Scheme to Improve Maneuverable Capabilities

Rui Yang<sup>a</sup>, Xuchen Feng<sup>a</sup>

<sup>a</sup>Ocean University of China, Qingdao, 266100, China

#### ARTICLE INFO

Keywords: AUV design Hydrodynamic Modling  $H_{\infty}$  Robust Control

#### ABSTRACT

This is the abstract. This is the abstract.

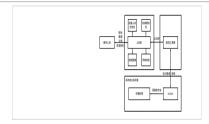


Figure 1: 123546546

# 1. Inroduction

This is the Introduction. This is the Introduction.

## 2. Development of HCAUV

This is Development of HCAUV. This is Development of HCAUV.

## 2.1. Structural design

This is Structural design. This is Structural design. This is Structural design.

#### 2.2. Buoyancy shell design

This is Buoyancy shell design. This is Buoyancy shell design. This is Buoyancy shell design.

#### 2.3. Thruster configuration

This is Thruster configuration. This is Thruster configuration. This is Thruster configuration.

## 3. Hydrodynamic Modeling

This is Hydrodynamic Modeling.

# 4. $H_{\infty}$ Robust Control

This is Robust Control.

## 5. Experimental result

This is Experimental result.

#### 6. Conclusion

This is Conclusion. This is Conclusion.

<sup>\*</sup>Corresponding author ORCID(s):