

# Remotely Operated Vehicle (ROV) with Touch Sensing Control

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## I. INTRODUCTION

## II. TOUCHING PAD

### A. Electric sensing principle

### B. Touching pad setup

### C. Measuring procedures

### D. Implementation

## III. VISUALIZATION AND FINGER LOCALIZATION

### A. Voltage color-map

### B. Machine learning for finger localization

## IV. REMOTELY OPERATED ROBOT (ROV)

### A. Modules

### B. Control method

### C. Communication with the touching pad

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[1] C. H. Yang Zhang, Gierad Laput, Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (2017).

[2] Y. Z. Sang Ho Yoon, Ke Huo, Proceedings of the 2017

UIST Conference on Flexible Sensing (2017).

[3] J. A. P. Thomas G. Zimmerman, Joshua R. Smith, Proceedings of the 1995 CHI Conference on MOAIC OF CREATIVITY (1995).