

# FP01

## Invited Session III(Haptic System )

13:30-15:30

Room : 1st Floor-Mozart

Chair1 : Woon-Chul Ham ( Jeonbuk National univ., Korea )

Chair2 :

13:30 – 14:10

●Invited Talk III

- Development system of welfare device for the aged, by the aged, of the aged.

---

14:10 – 14:30

FP01-1

### Development of a Parallel-Typed Walking Robot for Breakwater Construction

Kun Woo Park, Tae Sung Kim, Sung Min Park, Min Ki Lee(Changwon National Univ., KOREA)

- This paper presents a study on the development of a walking robot for an armor-stone work of the breakwater construction. The armor-stone work is putting stones about 0.3 ~ 2m<sup>3</sup> on the surface of the breakwater to prevent it from waving.
- This work has been done manually, and its process plan is uncertain by effects of the weather, wave and tide of sea. Therefore the constructional cost is considered to be wasteful.
- Working in underwater as well as on land for human workers causes the accident and caisson disease, so it is necessary to replace the process to be mechanized.
- The basic requirements of the robot for mechanizing are as follows :
  - 1) To have a large ...

---

14:30 – 14:50

FP01-2

### Emotional Recognition of speech signal using Recurrent Neural Network

Chang-Hyun Park, Kwee-Bo Sim(Chungang Univ., KOREA)

- Introduction- Concept and meaning of the emotional Recognition
- The feature of 4-emotions
- Pitch(approach)
- Simulator-structure, RNN(learning algorithm), evaluation function, solution search method
- Result

---

14:50 – 15:10

FP01-3

### The Robot Arm Control by EMG Pattern Recognition

Joo-Woong Kim, Kyung-Kwon Jung, Jin-Seong Park , Ki-Hwan Eom(Dongguk Univ., KOREA), Dong-Seol Son(Yuhan College, KOREA), Hyun-Kwan Lee(Honam Univ., KOREA)

- Contents 1 Intorduction
- Contents 2 EMG Signals and Measurement
- Contents 3 Intelligent Algorithm
- Contents 4 Improved LVQ
- Contents 5 Experiment
- Contents 6 Conclusion