Introducing **OpenManipulator**: Build your own manipulator
• Customization
• Customization
• Extensibility
• Customization
• Extensibility
• Customization
• Extensibility
• Open-source
int main(void) {
    while(1) {
        // Insert your code
        move();
    }
}
Customization
Customization

Dynamixel XL
Affordable Prices

Dynamixel XM
High Torque

Dynamixel XH
More Durability
Extensibility

Chain
SCARA
Link
Planar
Delta
Linear
Stewart
Robot Operating System

Gazebo

MoveIt!
Embedded system

Arduino for control

Processing for visualization

Open-source Control module for ROS
Mobile manipulator

- Current based position control
- Position control
- Velocity control
Full Open-source

Open-source Hardware

- **CAD Data**: OnShape (Search “ROBOTIS”)  
  - Chain: https://goo.gl/NsqJMu  
  - SCARA: https://goo.gl/oVsK8m  
  - Link: https://goo.gl/MJ6C8K

And more coming soon!!

Open-source Software

- **Firmware & ROS package**: Github (Search “ROBOTIS-GIT”)  
  - OpenManipulator: https://github.com/ROBOTIS-GIT/open_manipulator  
  - OpenCR: https://github.com/ROBOTIS-GIT/OpenCR

Your contribution is welcome!!
Build your own manipulator
With OpenManipulator
YoonSeok Pyo
ROBOTIS
Open Source Team
Senior Researcher
pyo@robotis.com

RyuWoon Jung
ROBOTIS
Open Source Team
Researcher
rwjung@robotis.com

TaeHoon Lim
ROBOTIS
Open Source Team
Researcher
thlim@robotis.com