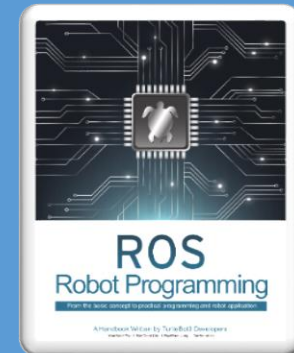


Robot Software Platform

ROBOTIS

KAIST



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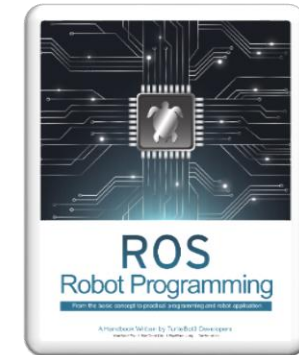
Contents

I. Components of the Platform

II. Robot Software Platform

III. The need for a Robotic Software Platform

IV. The Future that Needs for Robot Software Platform will Bring to Us



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What do these two things have in common?



Personal Computer



Personal Phone

Popularized Products
that everyone has

Hardware modules enable various combinations



Personal Computer

Galaxy S5 Tear Down



SAMSUNG TOMORROW

Personal Phone

Operating System + Application



Personal Computer



Personal Phone



Hardware Module + Operating System
+ Application + Users
(Service)



**Hardware Module + Operating System
+ Application + Users
(Service)**

Division of labor in product ecosystem

What about
Robotics Field?

Robot Development



Are you actually a genius?

NOW...

Changes brought by the software platform



[The first commercially available mobile phone (?) In 1983 Motorola DynaTAC 8000 and developer Martin Cooper, and the evolution of mobile phone]

Changes brought by the software platform

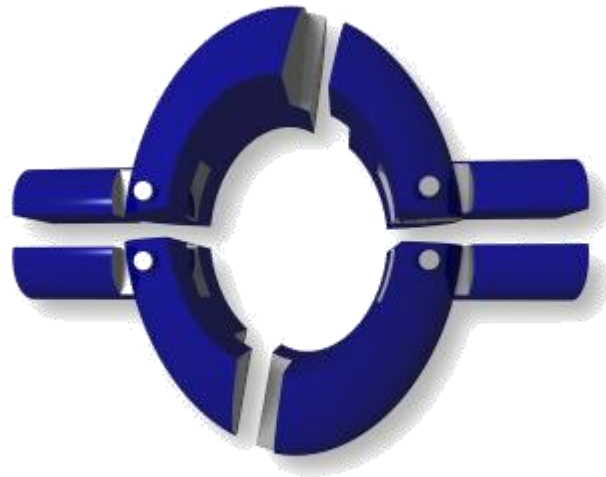
- Hardware interface integration
- Hardware abstraction, standardization, and modularization
- Price ↓, Performance ↑
- Separation of hardware, operating system and application
- Focus on services that meet your needs!
- User increases! Purchase and feedback, forming a new ecosystem



iOS



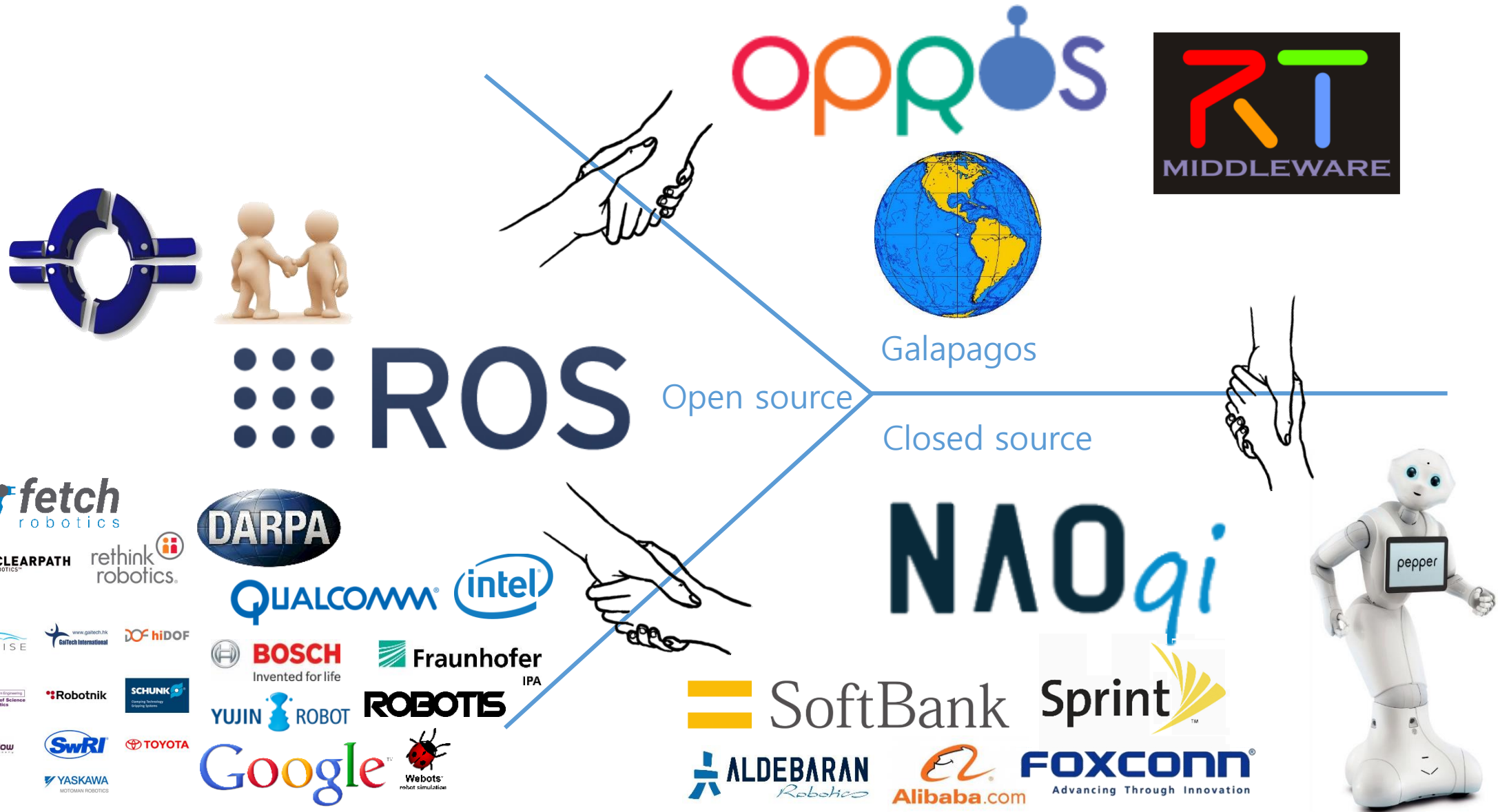
What about robots? Flood of various Robot OS!



Major robot operating system



Major robot operating system



What is your
favorite ROS?

What is your favorite ROS?

It is the most difficult question in many ways!

Let's think differently.

Stop creating a playground !



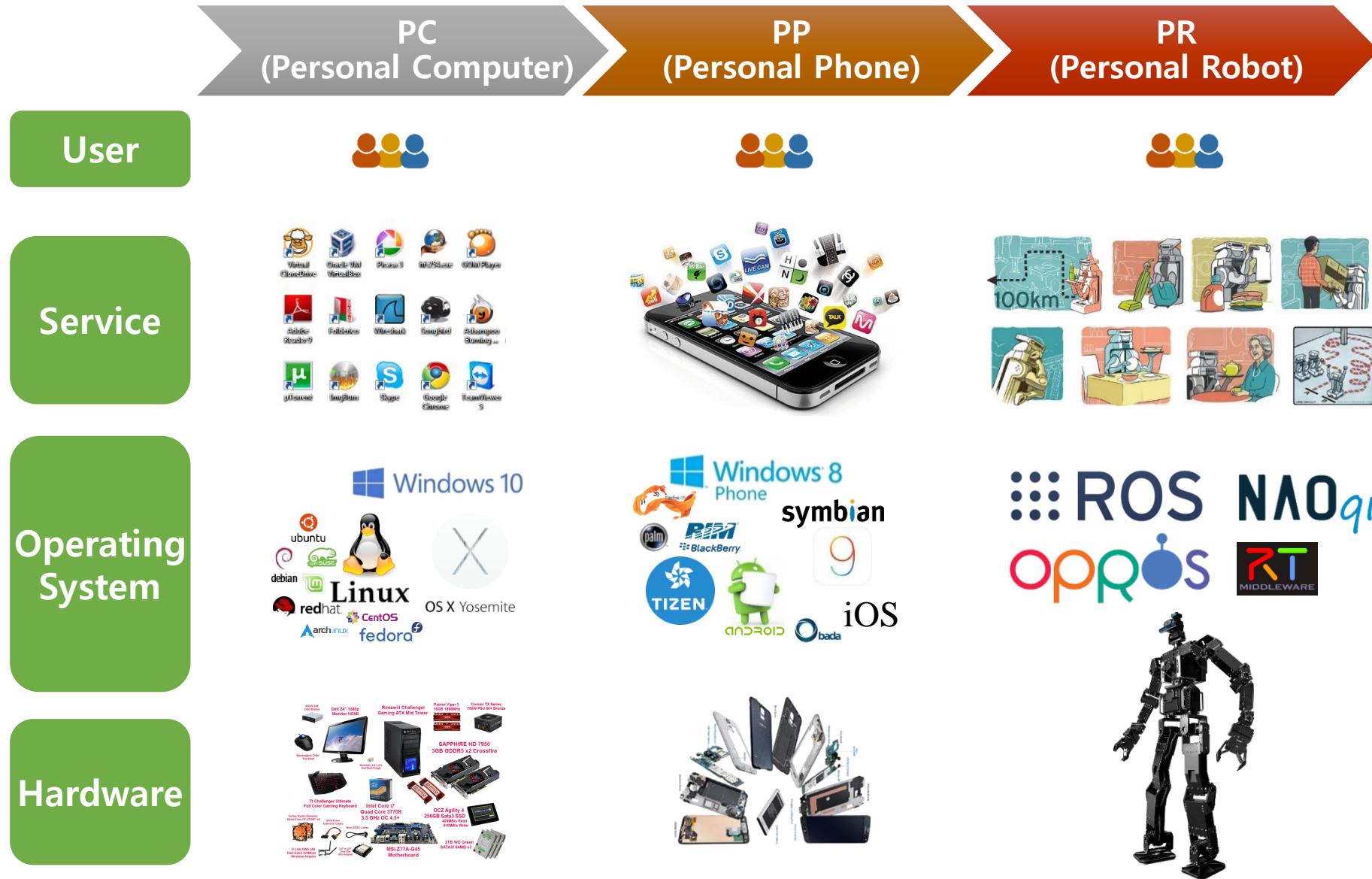
Let's dream of **a great player** on the ground!



Future Robot Software Platform will bring

- Establish **an interface** between the hardware platform and the software platform
- **Modular hardware** platform proliferation
- Applications can be written without knowledge of hardware
- More **software personnel** can enter the robotics field and participate in the robotics product
- Focus on **services** to be provided to users
- Formation of **User** layer and **feedback** by delivering demanded service
- An opportunity for the rapid advancement of robot development

History repeats itself! Are you ready for it?



Question Time!

Advertisement #1



Free

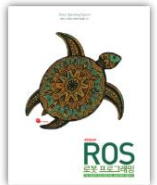


Download link



Language:

English, chinese, Japanese, Korean



“ROS Robot Programming”

A Handbook is written by TurtleBot3 Developers

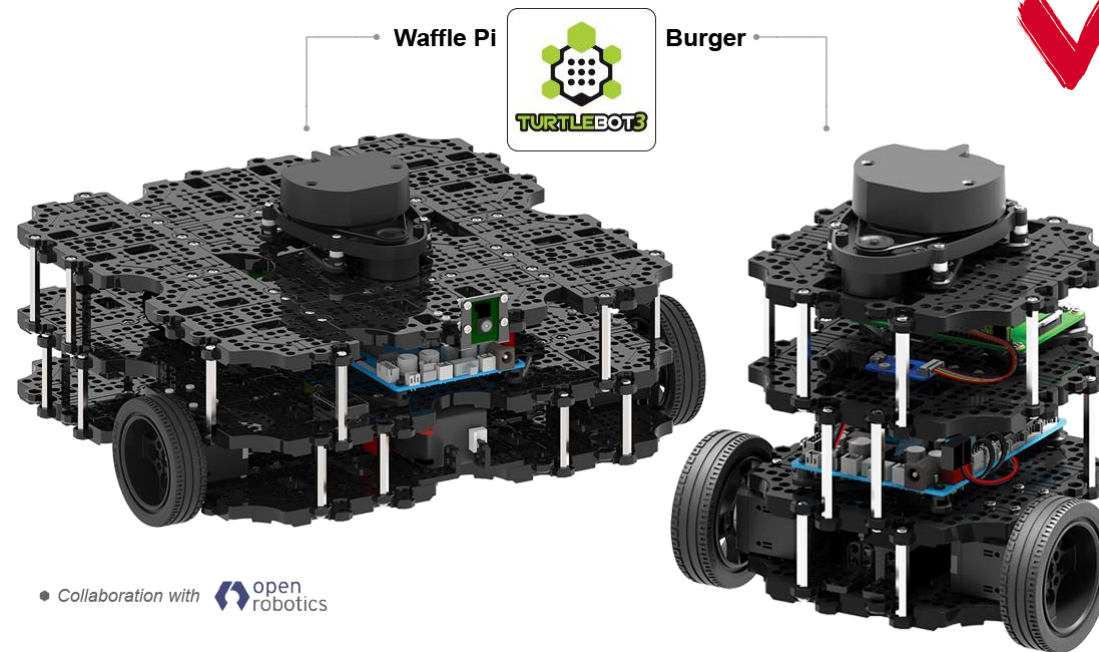
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TURTLEBOT3

AI Research Starts Here
ROS Official Platform

TurtleBot3 is a new generation mobile robot that's modular, compact and customizable. Let's explore ROS and create exciting applications for education, research and product development.

✓ [Direct Link](#)



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The 'RobotSource' community is the space for people making robots.

We hope to be a community where we can share knowledge about robots, share robot development information and experiences, help each other and collaborate together. Through this community, we want to realize open robotics without distinguishing between students, universities, research institutes and companies.

Join us in the Robot community ~

END.