# Software Development Process to Deliver Value

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#### **Research Topics**

- 1. Model-driven development of software for autonomous robots
- 2. Development of web applications for education

#### **Research Seeds**

## Practice of model driven development methodology for embedded system

The importance of model-driven development is strongly recognized for creating software with high quality and high reliability at the development site of embedded software. Model-driven development is a software development methodology that uses a software design model which represents concepts or topics related to a specific problem to be solved. To promote model-driven development, we are providing useful reference design models for embedded industry fields. We are also proposing various verification methods that use models effectively in software development process.

# Practice of web application development with agile development method

To develop valuable software, methods based on hypothesis verification are very effective. In recent years, agile development has attracted attention as a hypothesis verification type development process. We have developed an educational application for children and a medical diagnosis support system using agile method. We have also been verifying the method's effectiveness.

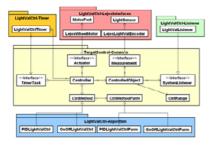


Fig. 1. Design model of autonomous robot control software.



Fig. 2. Usability test of educational application for children.

## **Related Technology**

- · UML/SysML Modeling
- · Agile (Scrum)