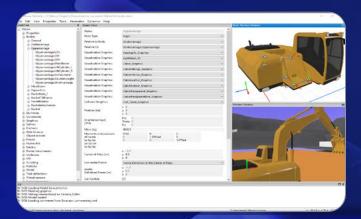
# Mevea Academic Solution Options



## Mevea Software Package

### **Mevea Modeller**



## A specialized Modelling tool for real time dynamics:

- Mechanics, hydraulics & powertrain
- Process models (e.g. soil)
- Collisions
- Virtual sensors
- Control signals
- External I/O definitions

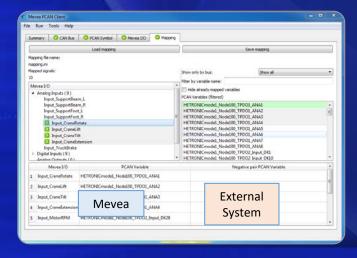
### **Mevea Solver**



## Real time Solver for connected Multibody System Dynamics incl.:

- Hydraulic actuator forces
- Tyre forces
- Rope forces
- Contact forces
- Wind resistance forces

### Mevea I/O Toolbox



## Mapping, client and signal tools for I/O connection creation and running:

- Asynchronous method for data transfer between Solver and separate software or hardware
- Real controllers, machine control systems and other hardware in-loop
- Support for large amount of inputs and outputs



### "Mevea Research Pack" Overview

Work Process

Environment

Machine

I/O Interface



## 1. Mevea Simulation Software and Excavator Digital Twin

- Mevea Software Package for Simulator (x1) and Classroom (x10)
- Excavator Digital Twin with Unity3D visualisation
- Virtual environment





### 2. Machine Control System

Siemens SIMATIC 57-1200 logic with display





### 2. Simulator with Motion Platform

 Simulator with motion platform, computer, displays, operator seat & controls and VR headset



## **Mevea Academic Solution Packages**

Solution	Description	Content
1. Research	Mevea software for research usage.	1 x Mevea software Package (i.e. one concurrent user)
2. Teach and Research	Mevea software for classroom & research usage.	<ul> <li>10 x Mevea software Package</li> <li>Mevea software training via web or at Customer premises</li> </ul>
3. Teach, Research, Learn and Experience ("Mevea Research Pack")	Mevea software for classroom & research usage and Mevea simulator platform with motion for Digital Twin "handson" experience.	<ul> <li>10 x Mevea SW Package and 1 x Mevea Simulator SW Package</li> <li>Mevea Excavator Digital Twin or optionally customer specific equipment model</li> <li>Mevea SW training via web or at Customer premises</li> <li>Mevea simulator platform with motion</li> <li>Siemens SIMATIC S7-1200 logic with display</li> <li>VR Headset</li> </ul>

Mevea SW Package = Modeller, Solver and I/O Toolbox

Mevea Simulator SW Package = Modeller, Solver, I/O Toolbox, Launcher, Motion Platform Controller and Remote Access

#### **Contact Us!**

www.mevea.com sales@mevea.com

Laserkatu 6, FI-53850 Lappeenranta

