



# Experiential Learning in Virtual Environments: Controlling Robots using Systems Modeling Language (SysML) and MediaPipe

Center for Advanced Computation and Telecommunications (CACT)

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## Digital Engineering Certificate

❖ A 12-credit graduate certificate in DE to provide skills in Digital Transformation and Model-Based Systems Engineering (MBSE)



❖ Introduces systems thinking and the System Modeling Language (SysML) through project-based learning.



❖ Presents structure and specification using MBSE, OOSEM and MagicGrid



❖ Integrates UAF and MBSE into modeling and simulation of cyber-physical systems

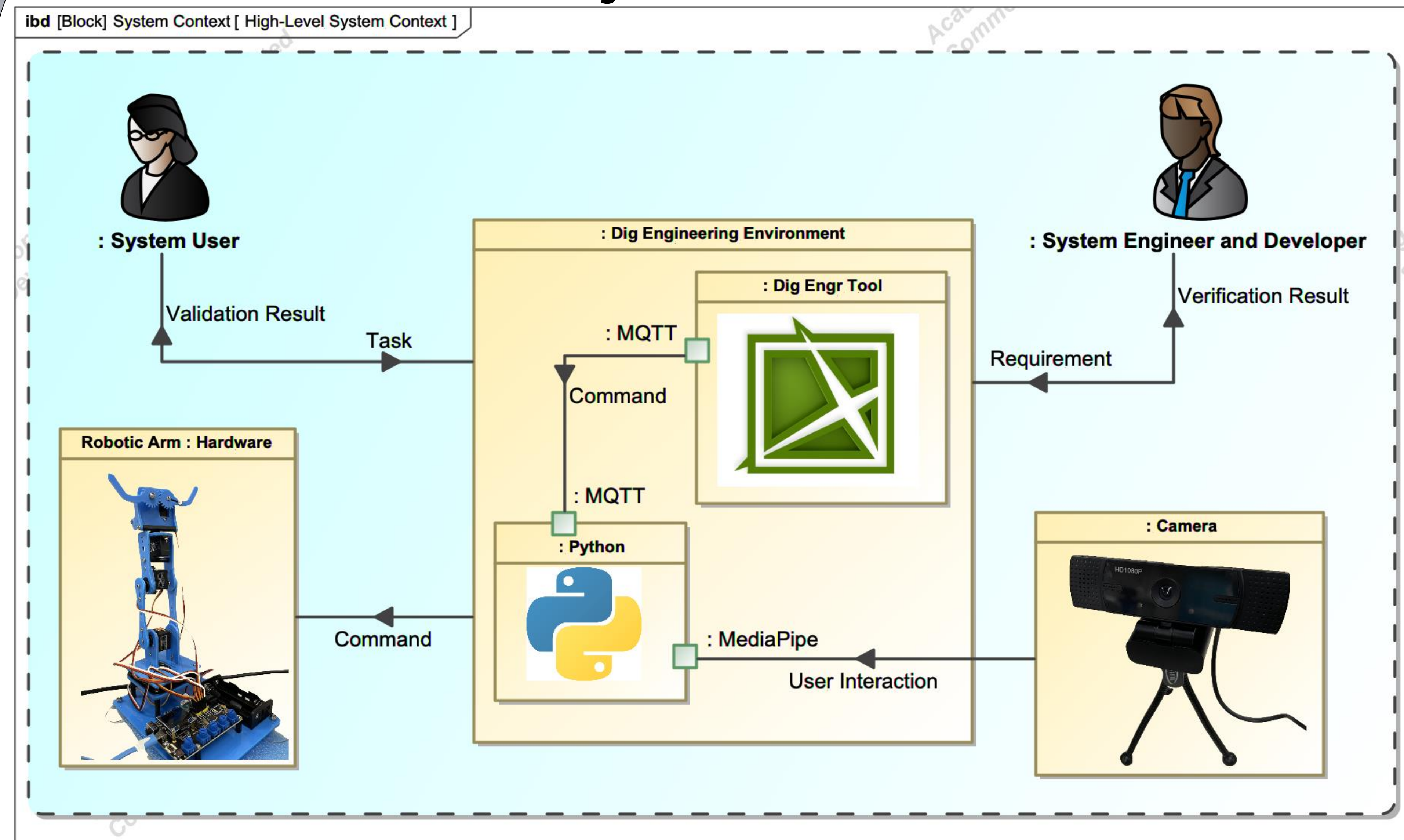


❖ Presents data-driven approach for integrating decision making and risk management in SysML models

- ❖ Offered as 8-week GPS course
- ❖ Can complete certificate within 1 year
- ❖ Contact: Prof. Kavitha Chandra, kavitha\_chandra@uml.edu



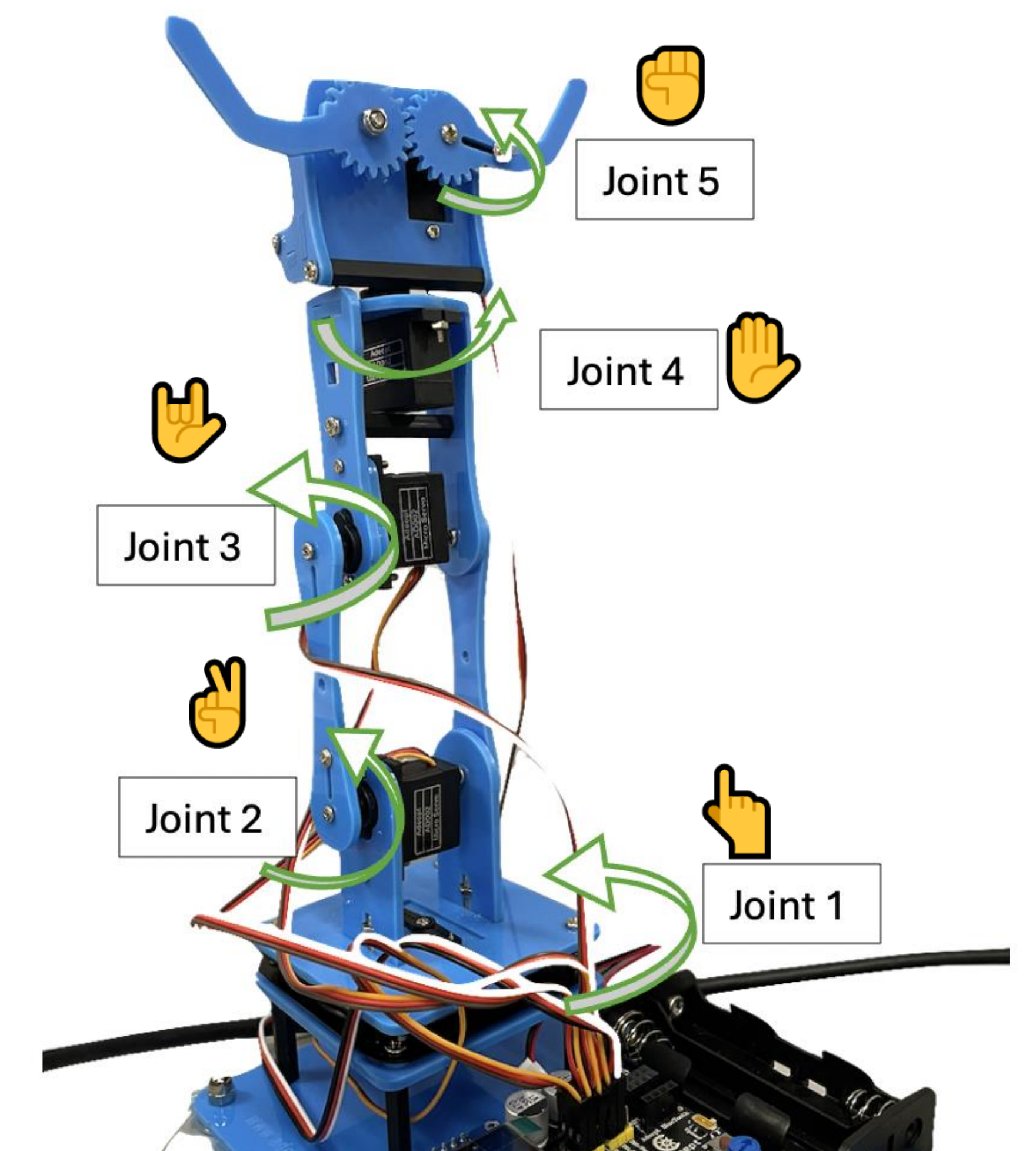
## Project Overview



❖ Live interaction with robotic arm feedback

❖ Competition Based Task for student remote communication

## Use Case Examples



Peter Mendre Jr in CACT performing gestures

