

Microcontroller-based sequential deposition control systems using behavior tree algorithms: ALD for the “App Generation”

Brandon D. Piercy, Joshua N. Crane, Mark D. Losego

Supplementary Document

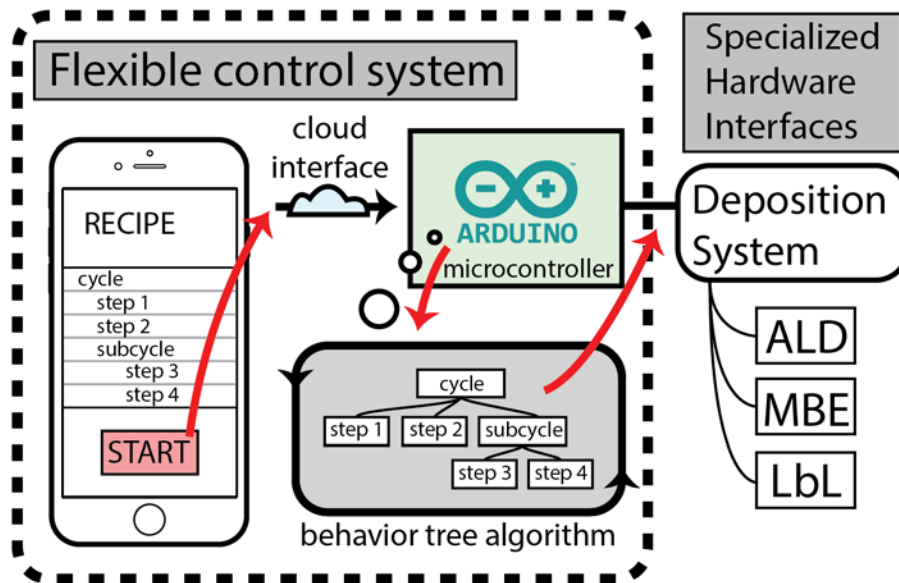


Figure 1. Schematic illustrating how the microcontroller system interfaces with a remote control “app” and with custom deposition equipment. A “recipe” file is sent from an app or other user interface to the microcontroller, either remotely via a cloud interface or locally. The microcontroller then executes the recipe using the behavior tree algorithm, issuing digital or analog commands to or reading sensor data from the deposition system hardware. The part enclosed in the dashed box represents the “portable” component that can be customized to control different hardware systems.