

RTDE control; GUI and Dashboard

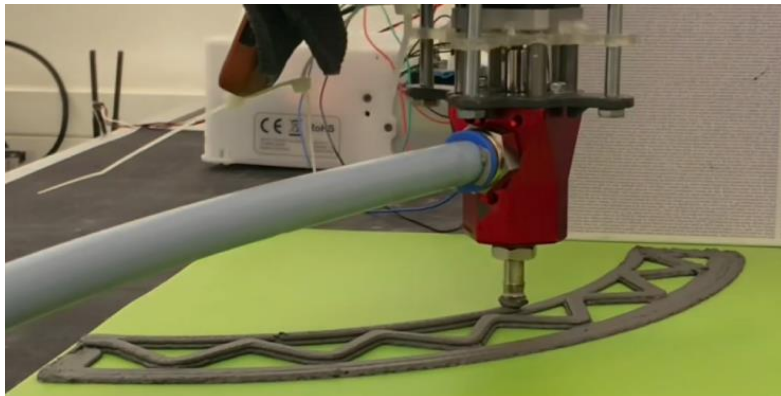
Task
In the context of a previous study, a robot control framework was developed for a UR robot setup equipped with a clay extrusion system. In order to improve the usability of the control framework, a GUI with integrated dashboard for robot and sensor feedback should be implemented.

Project Characteristics

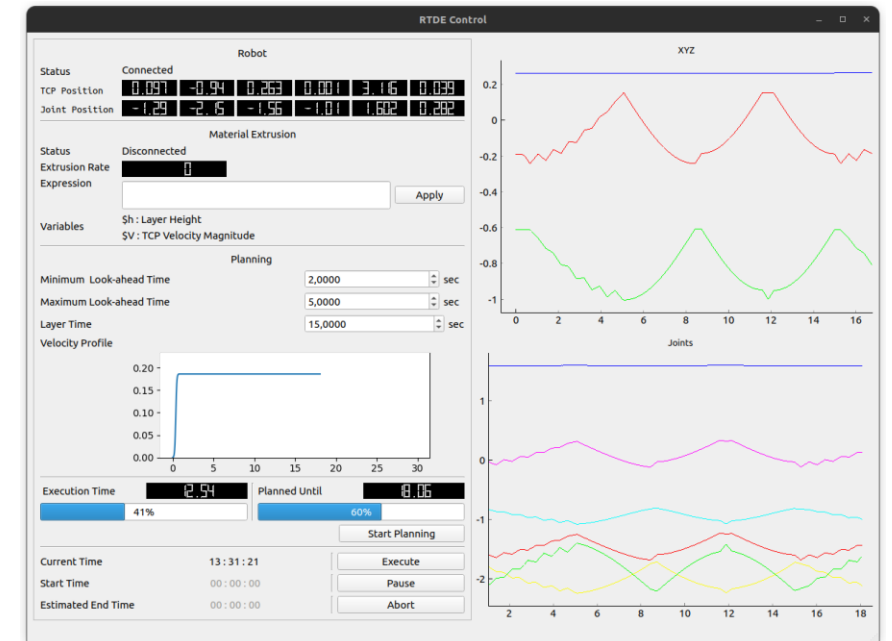
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Programming:	<input type="checkbox"/>
Science:	<input type="checkbox"/>

GENERAL INSTRUCTIONS:

- Familiarize with the RTDE control tool
- Implement a PyQt GUI
- Enable user interaction for the 3D-printing process (Start, Stop, Pause, Resume, etc.)
- Integrate a dashboard for robot and sensor feedback



Clay print using the RTDE control system (Slepicka, M; Helou, J; Borrmann, A; 2023)



Prototype RTDE robot control GUI (Slepicka, M; Helou, J; Borrmann, A; 2023)