









Setup description

Concept and realization

Results





- Say why our task is important
- ..



Figure: Robotic teleoperation in an everyday scenario. Picture taken from the SitCom "The Big Bang Theory"





- Define goal set for the demonstrator week here
- ...



Figure: Original concept for the 2019 summer school demonstrator





- Here goes the description of the involved problems
- Force feedback from soft tissue
- control for the system
- sensor
- communication and interfaces
- · ...



Figure: Balloon and pen during a drawing task. The pointy tip of the pen threatens to burst the balloon.





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Concept of the teleoperated drawing robot





Figure of the overall concept \dots

Sensor development





 $\ensuremath{\mathsf{Explain}}$ how the sensors were developed and their working principle

Communication



Explain the communication with MQTT Broker - IoT Style $\,$





Explain the control logic and how the robot is teleoperated





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Teleoperated Robot motion





Show video of the teleoperated robot motion here \dots

Force Feedback



Show video of the force feedback to the haptic device here \dots



Show video/results of teleoperated drawig \dots





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Conclusion & next steps



Come up with some conclusions here \dots



Say thanks to the PIs here \dots