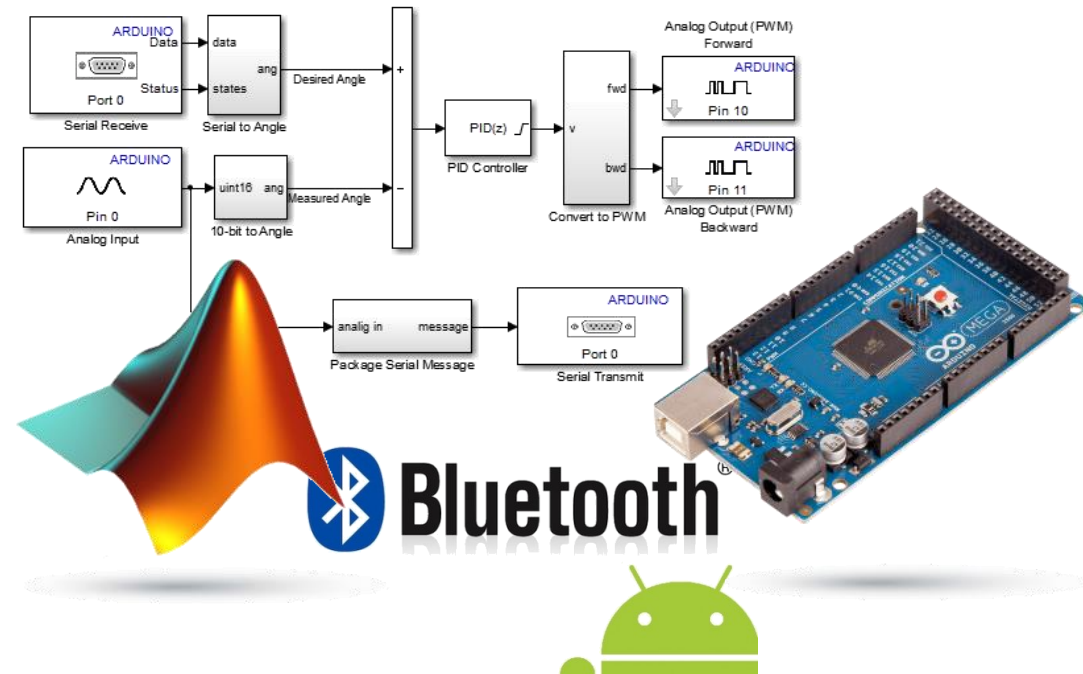


Embedded System Design

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» Teil 1

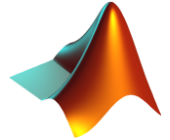
- » Theorievorstellung
 - » Arduino-Hardware, Arduino-IDE
 - » MATLAB/Simulink, Arduino Support for Target Hardware
- » Arduino-IDE Installation
- » Praktische Übungen (Code-Based)
 - » I/O: Blink LED, Lauflicht, Ampel
 - » Wetterstation
 - » Sensorik (ADC)
 - » USB (Serial)
 - » Display (Serial)
 - » Bluetooth (Serial)
 - » Thermostat
 - » Temperatursensor (ADC)
 - » DC-Fan (PWM)



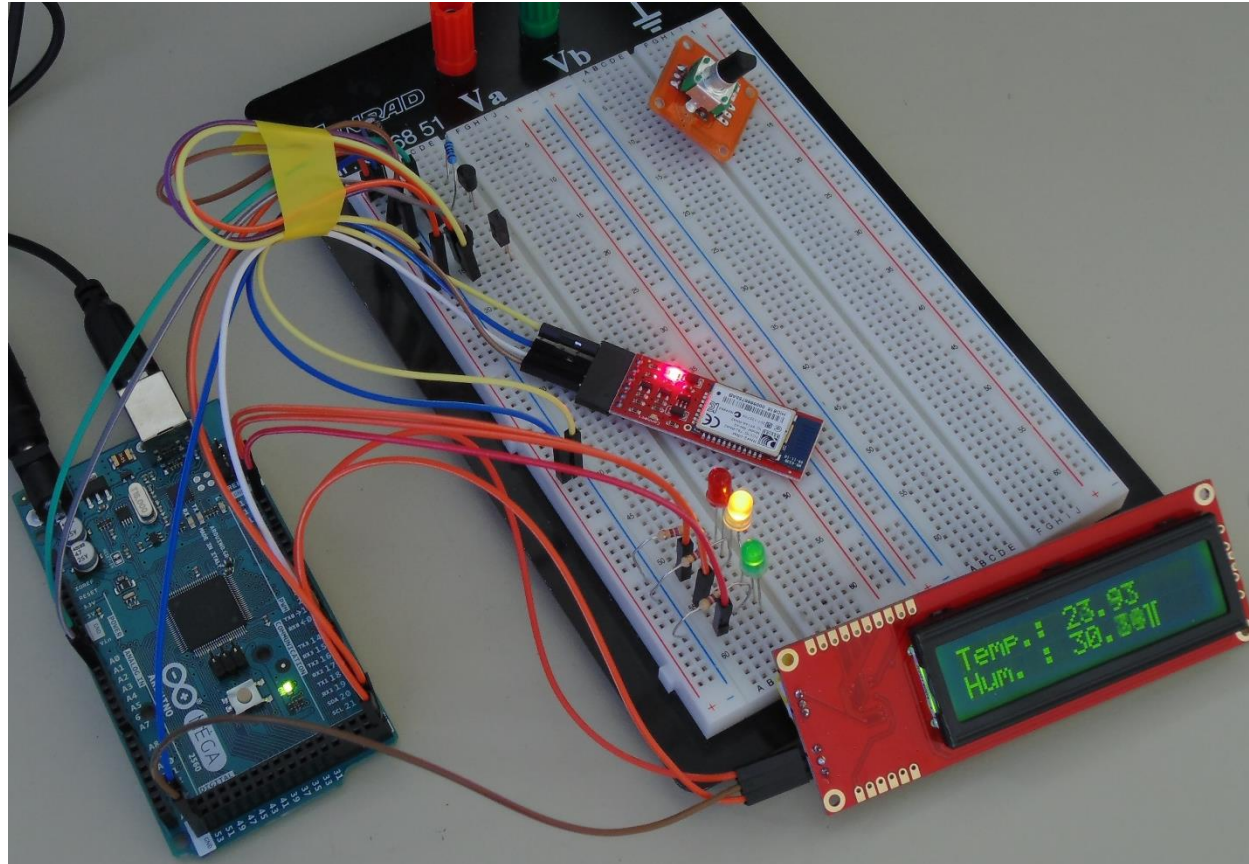
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» Teil 2

- » Matlab/Simulink Installation/Vorbereitungen
- » Praktische Übungen (Model-Based)
 - » I/O: Blink LED, Lauflicht, Ampel
 - » Wetterstation
 - » Sensorik (ADC)
 - » USB (Serial)
 - » Display (Serial)
 - » Bluetooth (Serial)
 - » Thermostat
 - » Temperatursensor (ADC)
 - » DC-Fan (PWM)
 - » Optional:
 - » MATLAB/GUI
 - » MIT-Appinventor
- Android-App Entwicklung (Block-Based)



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Embedded Hardware App

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University of Applied Sciences
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M. Anushefor

Select Bluetooth Client

Connected!

Disconnect Bluetooth

Transmit Accelerometer Sensor

Set Timer-Interval for Accelerometer Sensor [ms]:
 Set Timer-Interval

Accelerometer Sensor: X:34_Y:469

Set terminator:

Write ASCII to send:

Set Timer-Interval for Receive ASCII [ms]:
(TimerInterval = HardwareDelay - 150 ms)