

Python API for Mobile Robot Control

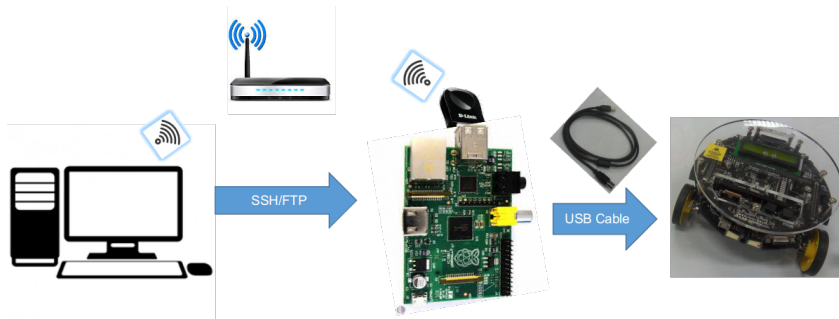
Progress Presentation-1

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Objective

System Architecture



Milestone Achieved

- 1 Robot-end firmware - written in embedded C
- 2 Serial Communication between Raspberry Pi and Robot
- 3 Function for configuring all IO Ports and Pins of microcontroller
- 4 Implemented and tested code for Buzzer and BarLED.
- 5 Test code for Port and Pin configuration function

Future Work

- Develop and test object-oriented implementation
- Access following peripherals for μ controller
 - Timers
 - ADC
 - Interrupt
 - I2C
- Improve data packet by incorporating checksum, end of packet payload to existing system.
- Design PyQT GUI for making SFTP connection to Raspberry Pi from PC
- Provide higher level abstraction for peripheral devices