

Internet of Things Semantic Arduino-based Sensor Device Prototype

SemIoT project - Semantic technologies for Internet of Things ¹

A. Andreev M. Kolchin N. Klimov D. Garayzuev
I. Shilin D. Mouromtsev

ITMO University, St.Petersburg, Russia

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ISST
Information Science and
Semantic Technologies



ITMO UNIVERSITY



¹<http://semiot.ru>

CoAP://

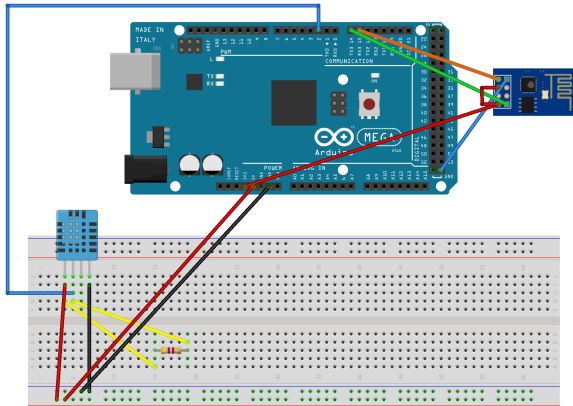
RFC 7252 Constrained
Application Protocol

- ▶ REST model
- ▶ resources available under a URL
- ▶ access through GET, PUT, POST, and DELETE methods
- ▶ working via UDP protocol

/microcoap

A C implementation that can
be compiled for Arduino

- ▶ Implemented CoAP features:
 - ▶ CoAP GET, PUT, POST and DELETE methods
 - ▶ Initial clients support
 - ▶ Initial endpoints setup
- ▶ CoAP features required implementation:
 - ▶ Resource subscribe option
 - ▶ Full-fledged CoAP clients support
 - ▶ Appropriate endpoints setup



fritzing

Arduino MEGA2560 with **ESP8266** WiFi-Module and **DHT11** temperature and humidity sensor

Future Plans: wireless device configurations tools
(mobile application).

