



# Augmented Reality for the Web of Things

## Description of Master Thesis

Fady Salama, August 8, 2022

Title: "Augmented Reality for the Web of Things"  
Supervisor: Fady Salama  
Period: 24 weeks  
Student: TBD

### Context

The Thing Description (TD) is a JSON document that was standardized by the World Wide Web Consortium (W3C) to describe Things and their Application Programming Interfaces (APIs) provided over a network. Having a such a clear description allows for any human or machine to interact with the device. In this work, the student should investigate possibilities for implementing a Web of Thing (WoT) compliant augmented reality application for Microsoft Hololens 2 that is able to handle the TD and allow an easier development and on-the-fly interaction and debugging of WoT devices.

### Requirements

- Understanding of the WoT Architecture and WoT Thing Description
- Prior Knowledge with Game Engine Development (Unity/Unreal Engine) is a MUST
- Prior Knowledge with Augmented Reality Development is PREFERRED
- Adequate proficiency in JavaScript/Typescript is optional