WITT – What is That Thing?

Master thesis/Exjobb
Mobile Services Laboratory
Communication Systems

Task

The market for home consumer IoT devices is aggressively being expanded by product vendors and service providers. Consumers are faced with a confusing selection of marketing brands, devices for various purposes, and uncertain conditions for a successful deployment in the home. The basic functionality and reliability of an expensive device is difficult to assess for the consumer, in particular when the potential interoperability with an existing infrastructure in the home is to be considered.

This degree project sets out to discover and codify common properties of popular and available devices presently available to consumers, and to propose content, format, and distribution mechanisms of generic and specific device descriptions, such that they will be machine readable by future IoT infrastructures.

A master thesis in this area may include the following:

- Find and evaluate previous and ongoing work on machine-readable device descriptions
- Propose a suitable description format and implement a prototype
- Evaluate the proposal in terms of descriptive power and potential for crowd-sourced growth
- Analyze the outcome of the evaluation and suggest further work.

Competence

We are looking for a motivated MSc student who has fulfilled the course requirements for the degree project. Good analytic skills are required, as well as basic knowledge of CMS. In addition, experience with online APIs, DBMS, and a good grasp of English are qualities that are highly valued.

Application

Applications should include a brief personal statement, CV, and a list of grades. In the application, make sure to mention previous activities or other projects that you consider relevant for the position. Candidates are encouraged to send in their application as soon as possible. Suitable applicants will be interviewed as applications are received.

Start time: spring 2017
Location: KTH, Kista, Stockholm

Mobile Service Laboratory

The Mobile Service Laboratory at the Department of Communication Systems' overall aim is to foster innovation, education and research in mobile services. The lab is pursuing the study, design, benchmarking, and evaluation of mobile applications and their associated services.

Active Browser

The Active Browser project explores user requirements for IoT in domestic environments.

Contact

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https://www.kth.se/en/ict/forskning/cos/research/mslab