**CMPE 294**

**Dr. Tridha Chatterjee**

**Assignment 2: Audience Analysis**

**Assigned Reading: “Smart Objects as Building Blocks for the Internet of Things”**

**Writing for an audience**

**Part 1:** Read the article that is assigned to you. Write two abstracts, one for **management** (business plan) and one for the **general reader** (understandable for general user). You can determine the types of abstracts you want to write based on the audience; for example, you could inform, instruct, propose, recommend, or persuade (Refer to Lecture Slide “Analyzing Audience and Purpose”). Each abstract should be 300 words single-spaced. Also, do not use bullet points in your abstract. It should have paragraphs. Reference the journal article for each of the abstracts.

**Part 2:** For this part you will write a comparison of the two abstracts. How did the style of writing differ? What assumptions did you make about the reader such as educational background, job experience, technical knowledge and the reason why the person is reading the document? Your comparison should be at least 300 words. Do not write your comparison in tabular or bullet form. You can write multiple paragraphs for your comparison. I would highly recommend that you read through Lecture Slides “Analyzing Audience and Purpose” when writing the memo.

**Your final submission should include two abstracts, and one comparison.**

**Use Memo format:**

**To:  Dr. Tridha Chatterjee**

**From:**

**Date:**

**Re:  Audience Memo**

**Submit all materials for this assignment as one file on Canvas//239.**

**The basic principle of Internet of Things or IoT is to connect all the potential objects in such a way that humans have the capability to manage them via internet. The Internet of Things was initially developed on the idea of introducing RFID into a networking technology. Although RFID was extensively used in tracking physical objects, it fails to have an impact when it comes to its limitations in sensing capabilities and deployment flexibility as it only supports short range communication. To overcome this issue researchers have introduced smart objects which have their own application logical unit that can interact with human users and can automate several other operations without any human intervention. After extensive research, the researchers have come up with three different canonical object types. They can be categorized as: activity-aware objects, policy-aware objects and process-aware objects. Researchers have developed these objects by strictly adhering to three main design dimensions: Awareness - which specifies about a smart object’s ability to understand, Representation – which refers to a smart object’s application and programming model, Interaction – which denotes the object’s ability to converse with the user in terms of input, output, control, and feedback. These smart objects helped companies to develop pay-per-use business model. The true potential of smart objects can only be utilized when multiple objects communicate and share information with each other. Whenever the smart objects are in close proximity, they communicate with each other via a peer-to-peer (P2P) reasoning algorithm. However P2P reasoning algorithm possess security concerns and performance related issues which needs to be addressed. Researchers are currently working on developing a new flow-based programming paradigm and as well as a means to increase smart object’s interactive capabilities to improve performance.**