Cross Domain expertise for an IoT Solution

1.1 Revision History

Version	Release Date	Author	Description
0.1	01/12/15	Saravanan S	Initial draft for review

1.2 Reference Documents

Document Name	Revision	Doc Number
https://www.coursera.org	Dec 2015	
https://www.udacity.com/	Dec 2015	
https://www.edx.org	Dec 2015	

1.3 Purpose of the document

This document enlists the cross domain expertise required for developing an IoT solution.

1.4 Required Domain expertises

The following domain expertises are needed broadly for developing a complete IoT solution

1) IoT Sensing, actuating and communication(IoT)

2) Data aggregation and presentation in an mobile based application(Android/iOS)

3) Data population on the cloud and analysis of the same(Data Science)

4) Analyse the data and help the sensors learn(Machine Learning)

1.5 Material references to build expertise

The following specializations/courses currently offered in mooc's such as coursera/udacity can be used to build expertise on each of these domains. Please note that some of the beginners course may be appropriate for everyone to take inspite of their chosen domain expertise.

IoT

https://www.coursera.org/specializations/internet-of-things - UC San Diego
https://www.coursera.org/specializations/iot - UC Irvine
https://www.edx.org/course/enabling-technologies-data-science-columbiax-ds103x - Columbia

Android/iOS development

https://www.coursera.org/specializations/mobilecloudcomputing2 - Maryland
https://www.udacity.com/course/android-development-for-beginners--ud837 - Android for beginners
https://www.coursera.org/specializations/ios-development
https://www.coursera.org/specializations/app-development
https://www.udacity.com/course/beginning-ios-app-development--nd006 - iOS nanodegree
https://www.udacity.com/course/android-developer-nanodegree--nd801 - Android nanodegree

Data science

https://www.coursera.org/specializations/jhudatascience
https://www.coursera.org/specializations/executive-data-science
https://www.udacity.com/course/viewer#!/c-st101 - Statistics 101
https://www.udacity.com/course/viewer#!/c-ud359/l-664109694 - Introduction to Data science
https://www.udacity.com/course/data-analyst-nanodegree--nd002 - Data analyst nanodegree

Machine Learning

https://www.coursera.org/specializations/machine-learning - University of washington
https://www.udacity.com/course/intro-to-machine-learning--ud120 - Introduction to machine learning
https://www.udacity.com/course/machine-learning-engineer-nanodegree--nd009 - Machine learning nanodegree
https://www.udacity.com/course/linear-algebra-refresher-course--ud953 - Linear Algebra