More and more devices and sensors are around us in today's world. There is an increasing tendency to connect devices and sensors to the Internet. We call such network the Internet of Things. As the cost of computing power continues to decrease, data collection and analysis becomes cheaper. Thus, we are able to get much better insight into different domains. This could be a problem in commercial sector, where we do not want to compromise proprietary know how or data. Especially big concerns are around personal data. We can now analyse behavior of people or get access to personal information such as health or spending patterns. This thesis addresses these privacy issues.