Title: Secure Access Control Framework for Big Data

Supervisory Panel: [Dr. Seyed A. Shahrestani](http://uws.edu.au/staff_profiles/uws_profiles/doctor_seyed_shahrestani) and [Dr. Chun Ruan](http://www.uws.edu.au/staff_profiles/uws_profiles/doctor_chun_ruan)

Student: Mohammed Al-Zobbi (PhD Candidate)

Summary:

The Big Data concept constitutes a need for a secure access control model. This research investigates the Big Data security concerns. Managing the access to a large size of data with multi-domain users is intractable. Data may be analyzed to reveal pattern trends and association. Securing data access over the cloud is essential to overcome the Big Data ubiquitous use and intensive access. Role-Based Access Control Model (RBAC) is inefficient in Big Data access management, due to its implementation complexity and security decrepitude. Attribute-Based Access Control Model (ABAC) is still under development and is still an active area of research. The research goal is to develop the proper framework that is able to mitigate the complexity of Big Data access control and security breach in system analytics.