

# COMP39/9900 Computer Science/IT Capstone Project

## School of Computer Science and Engineering, UNSW

**Project Number:** P28

**Project Title:** Event processing

**Project Clients:** Aya Tafech, Dr. Basem Suleiman, Prof. Fethi Rabhi

**Project Specializations:** Software development; Web application development; Computer Science and Algorithms; Big data analytics and visualization.

**Number of groups:** 2

**Main contact:** Aya Tafech

### **Background:**

Complex event processing is used to invest and analyse event data to derive business knowledge. It is useful when relationships between datasets exist in the form of business knowledge and determining which events have occurred and when adds more meaning.

### **Requirements and Scope:**

Students will design and build their proposed solution for a complex event processing engine that can take two datasets, determine events that have occurred in each and then analyse how the events are related via a rule repository.

The students will need to choose two datasets at least and each dataset must have at least two types of events defined. The two datasets also need to be related through business knowledge that will be used to create a rule repository. The final design should also include a user interface that shows the detected events and the inferred relationships.

### **Required Knowledge and skills:**

- Python programming
- Good event data processing knowledge
- Familiarity with Web application development.

### **Expected outcomes/deliverables:**

- Documentation that covers solution design, architecture, and use of the event processing engine.
- Implementing the product using two datasets
- Presentation/demonstration of the application and how a data user would interact with the application.

### **Supervision:**

Aya Tafech

**Additional resources:**

TBC