



PhD topic #1: **Cyber threat intelligence using big data analytics**

Cyber threat intelligence is an area of cybersecurity that focuses on the collection and analysis of information about current and potential attacks that threaten the safety of an organization or its assets. The benefit of threat intelligence is that it is a proactive security measure, predicting attacks and their severity, and even preventing these attacks or at least reducing their impacts. The objective to be pursued in this PhD thesis is to predict different types of attacks and their severity over a time horizon ranging from a few seconds to a few days. The approach to be adopted is to use both endogenous data (including honeypot data) and exogenous data (global social, social networks, geo-political events, technical vulnerabilities, etc), and to use big data analytics and machine learning.

- The doctoral candidate will be supervised by Dr Ghita Mezzour and Dr Mounir Ghogho.
- Applicants must have a Master (or equivalent) in computer science or equivalent field.
- Good skills in data science and a good command of English are required. Prior research experience is viewed positively but is not necessary.
- Applications should be emailed to [ticlab-admin@uir.ac.ma](mailto:ticladmin@uir.ac.ma) and doctorat@uir.ac.ma