

## **Towards a South African Crowd Control Model**

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### **Abstract**

With the escalating number of incidents of service delivery, labour related protests and the increasingly violent nature of protests; crowd control is one of the major challenges facing South Africa today. Often these protests are characterized by violence stemming largely from clashes between the protesters and the law enforcement agencies, which results in property vandalism and even death. For this reason, there is a demand for greater understanding, modelling and simulating crowd control. In response, this project aims to develop a crowd control model that will be used to understand the interactions between different variables during the protest and subsequently a better crowd control approach. However, modelling a multidimensional social problem as complex as crowd control requires time, knowledge and experience from a wide range of disciplines. This is therefore a long-term project consisting of three main phases. Phase 1, identifies the most important variables concerning crowd control and how they relate to each other using general morphological analysis. Phase 2 of the project will be the verification and validation of the model by experts in the field, which will be followed by the identification of relevant tools and techniques. Phase 3, will be the development of decision support system for crowd control. This paper discusses Phase 1 of the project, which includes identification of various variables regarding crowd control and their relationships. During the Arab Spring Uprisings, social media was identified as one of the factors significant for the mobilization of the crowd. This phase will determine if social media is one of the major factors to consider in a South African context and the extent to which it affects the crowd. The role of social media or lack thereof has some implications on cyber defence in South Africa. The identification of variables and the relationships between them were carried out in a facilitated workshop. The result of this phase is a South African general morphological analysis crowd control model.