

Detumbling of satellites

Kongsberg Defence & Aerospace are launching several satellites in the coming years, with varying sizes and shapes, for maritime surveillance and communication. When satellites are launched, they are released with such force from the launcher that they “tumble”. The detumbling period affects how quickly we can utilize the satellites. For this thesis, the candidate(s) should review state-of-the-art detumbling methods and periods; evaluate the performance of KDA satellites and approaches; develop/suggest better methods/algorithms for shortening the detumbling time. The assignment will comprise mathematical modeling of satellite and actuators, design of controllers, and simulations.

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