# Noget med power

*This chapter contains the carrying out of a field test that deals with the power consumption and the electrical specifications of a agricultural mobile robot while processing a field. It is essential for the project to know these specifications.*

## 1   Introduction

A major key factor in developing a battery pack is the electrical specifications.

Outcome: The outcome of this test is divided into two parts. First of all it will determine the power consumption and current drained from the batteries. Second, comparison between between the power analyzer and the data collected in a rosbag from the RoboteQ will determine if the controllers data are reliable. In case of the data from the RoboteQ controllers are reliable, then data from previous trials can be used to improve the estimation of energy consumption and electrical specifications. Else the data from the power analyzer must be used, but with expectations of a greater error.

stikord: - udføres på armadillo IV - Control af om den information der gives fra motorcontrollerne passer, de vi så har mulighed for at kigge i gamle ros bags - henvisning til problem formuleringen med hvilke data vi skal bruge -

It is necessary for the process to get an estimation of the energy

## 2   materials and Methods

Stikword: - materialer gir sgu sig selv - test kørsel 10 M frem - måling med Turnigy camera - Måling fra motorcontrollere / ROS bag - Lasse klipper marken - Hvordan vurdere vi troværdigheden af data/dataanalyse -

## References

[1] Sphere, Wolfram.com `http://mathworld.wolfram.com/Sphere.html`

[2] WebGL 3D Cameras, Greggman.com `http://games.greggman.com/game/webgl-3d-cameras/`

[3] LookAt Algorithm , Keith Maggio, Wordpress.com
http://keithmaggio.wordpress.com/2011/01/19/math-magician-lookat-algorithm/

[4] Travelling Salesman Problem Algorithm, George Washington University, seas.gwu.com
http://www.seas.gwu.edu/~simhaweb/champalg/tsp/tsp.html

[5] Roland Geraerts and Mark H. Overmars. *The International Journal of Robotics Research: Creating High-quality Paths for Motion Planning. The International Journal of Robotics Research 2007; 26; 845. DOI: 10.1177/0278364907079280*

[6] Procrustes Analysis http://en.wikipedia.org/wiki/Procrustes_analysis