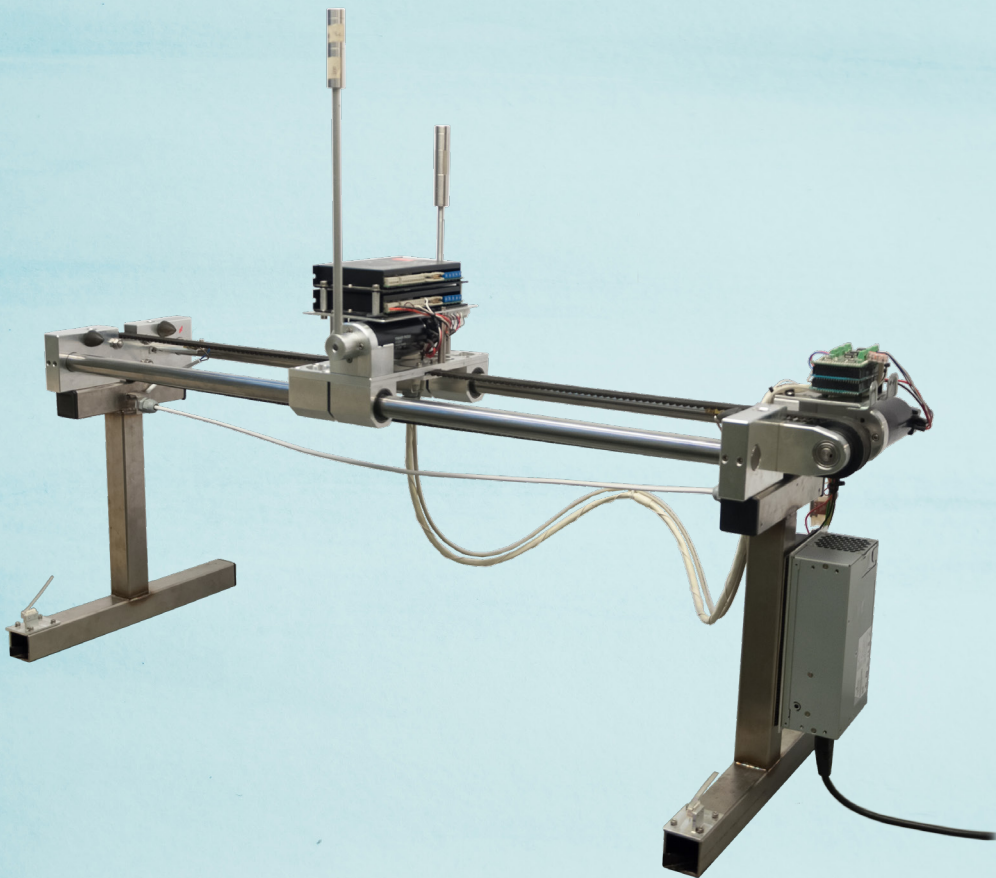


SWING-UP AND STABILIZATION OF A CART PENDULUM AND TWIN PENDULUM SYSTEM

Using Nonlinear Control Strategies



Niels Skov Vestergaard

Master Thesis
Control & Automation



AALBORG UNIVERSITY
DENMARK

**Swing-up and Stabilization of a Cart
Pendulum and Twin Pendulum System**
Using Nonlinear Control Strategies

Niels Skov Vestergaard
January 2019

Control & Automation

Aalborg University
Department of Electronic Systems
Fredrik Bajers Vej 7
9220 Aalborg Øst



AALBORG UNIVERSITY
DENMARK