Digital Control of CE 151 Ball & Plate Model
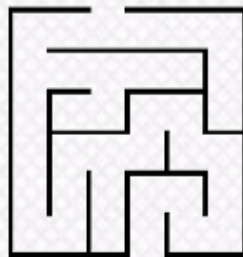
author: Lubos Spacek
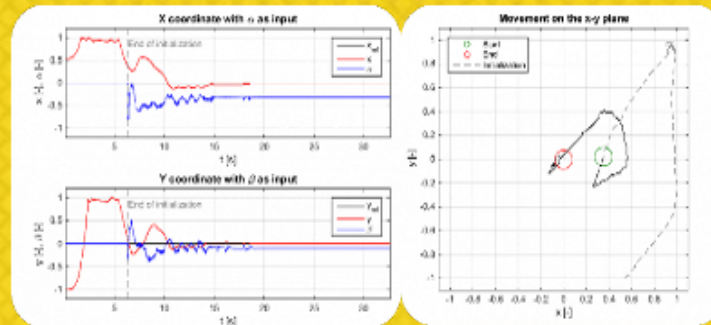
supervisor: prof. Ing. Vladimír Bobál, CSc.

Univerzita Tomáše Bati ve Zlíně
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Motivation:

- real-time digital control of unstable process with 2 degrees of freedom
- navigating an arbitrary maze created on the plate
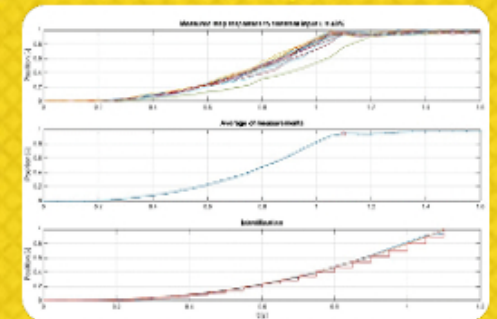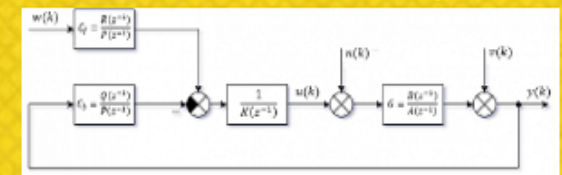- extending the possibilities of the model for educational purposes

Identification process

2DOF LQ controller design

Real model control results

Real model maze navigation

Maze path determination using watershed transform