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Updating the TOMMAT application in the MATAB

Students: Peter Židzik, Tomáš Pataki
Company: IEEE Smart Sensing Solution, Ing Tomáš Girašek
University mentor: prof. Ing. Alena Pietríková CSc.

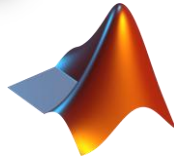Automating DVPR report generation by auto-filling unmeasured seat position as **OK** in excel

Motivation & Objective

- ✓ Manually measuring all seat positions in SBR sensor testing for DVPR reports is slow and repetitve

- ✓ **Goal:** Automate the TOMMAT system to reduce manual testing effort

- ✓ **Solution**: Auto-fill missing seat positions as **OK** in Excel based on boundary checks

SBR seat sensor

Solution Architecture

- ➤ **Input:** Measurements & Criteria

- ➤ **Core**: CheckPassedFast

- ➤ **Decision**: Boundary pass checks

- ➤ **Output**: Comput DVPR in Excel (OK auto-filled)

Approach

- Measure key seat positions first/last

- New algorithm decides **if** boundary values pass

- **If** acceptable, auto-fill missing positions as **OK**

Key Features

- ✓ Fast boundary check evaluation

- ✓ Automatic OK filling for unmeasured positions

- ✓ Direct Excel DVPR write

The approach reduces manual measurement effort and speeds up DVPR reporting by auto-completing missing posiiotns as OK when boundary check pass

Results

- ✓ Faster DVPR creation

- ✓ Fewer required measurements

- ✓ Auto-fill missing positions in Excel

Future Work:

- • Add position template f.. structured automation

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