SysEE
Lehrstuhl für Systemtechnik
elektrischer Energiespeicher

UNIVERSITÄT BAYREUTH

Implementing a Recursive Least Square for online DRT Estimation

The Distribution of Relaxation Times (DRT) is an established and intuitive Methode to assess the underlying Process of Lithium-Ion Batterys. Yet, most algorithm to determine the DRT use batch calculations that can not run on microcontrollers.

The aim of this Master Thesis is to implement and test an algorithm that uses Recursive Least Square to extract the DRT out of time domain data. The topic and fundamentals will be explained to the student. In addition, the student will:

- Deepen his understanding on data processing and evaluation

- Enhance your proficiency in Python

- Gain hands-on experience with specialized software tools used in battery testing and evaluation
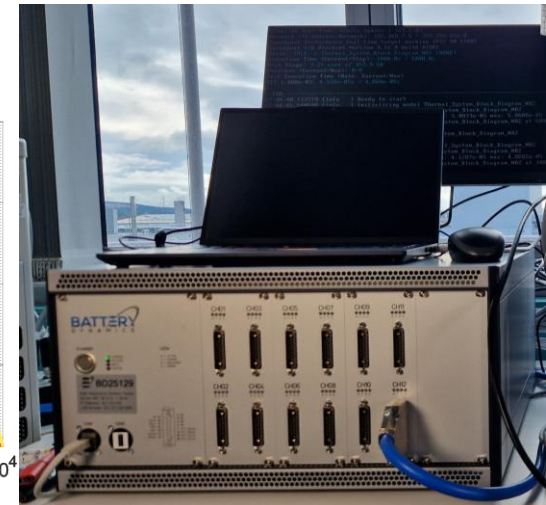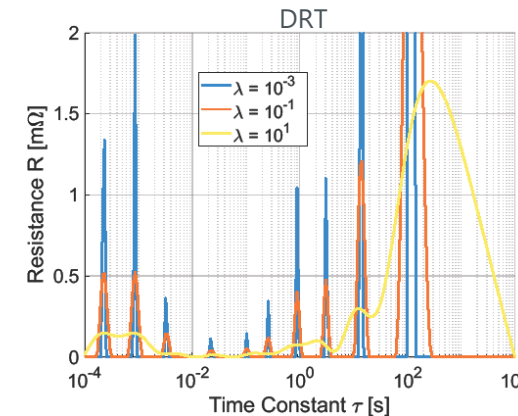
Qualifications:

- Fundamental programming knowledge
- Independent and careful way of working

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