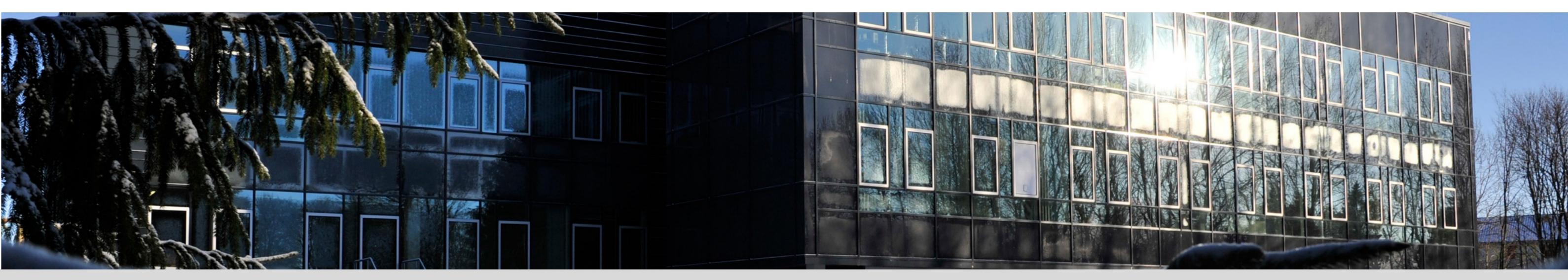
# TU Clausthal ISSE Institute for Software and Systems Engineering



#### **Research Group: Requirements and Architecture**

## **Modelling in Software and Systems Engineering**

## Challenges

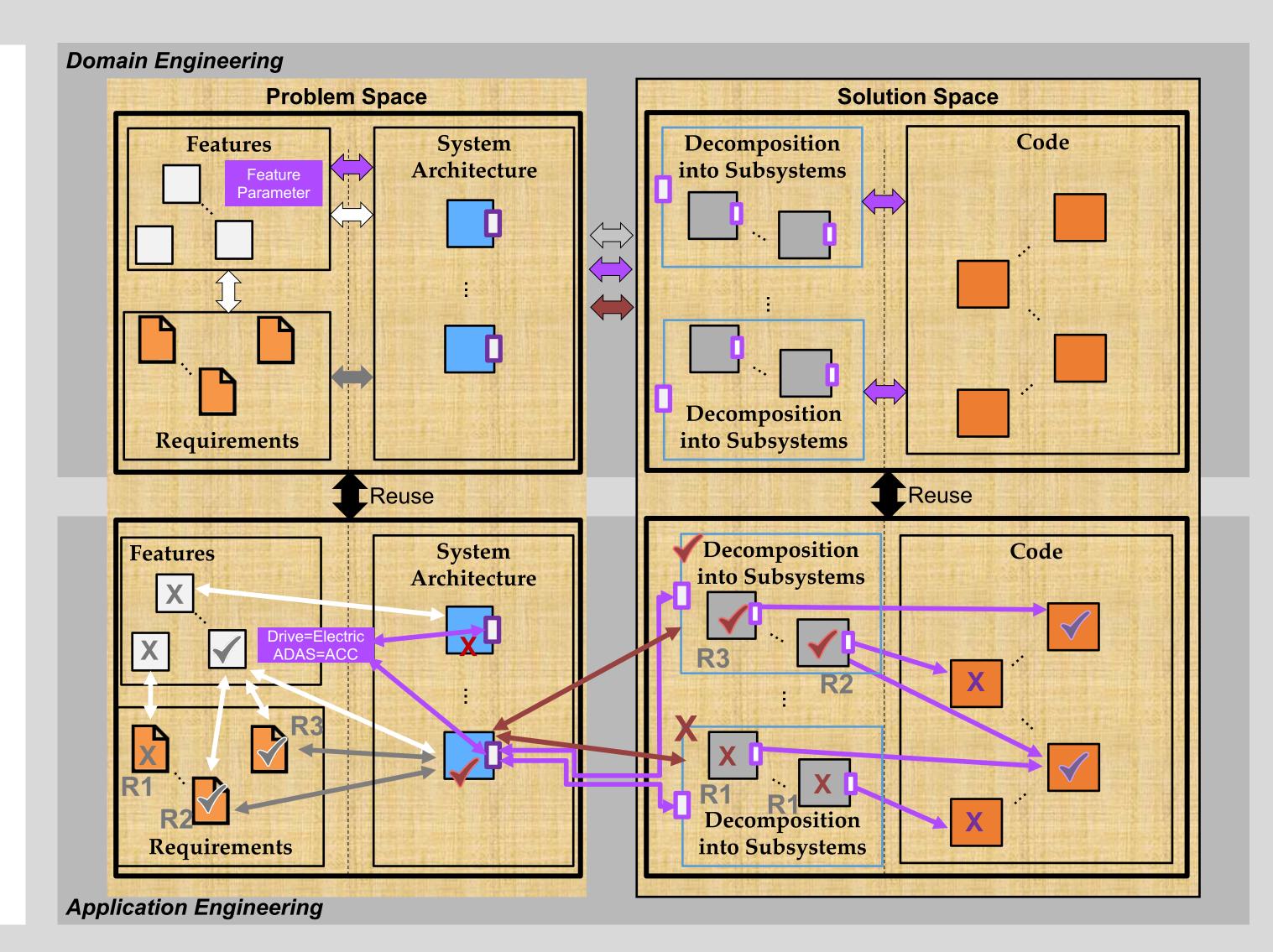
Traceability of requirements.

Managing complexity and variability of product-line based systems.

Systematic reuse and integration of models.

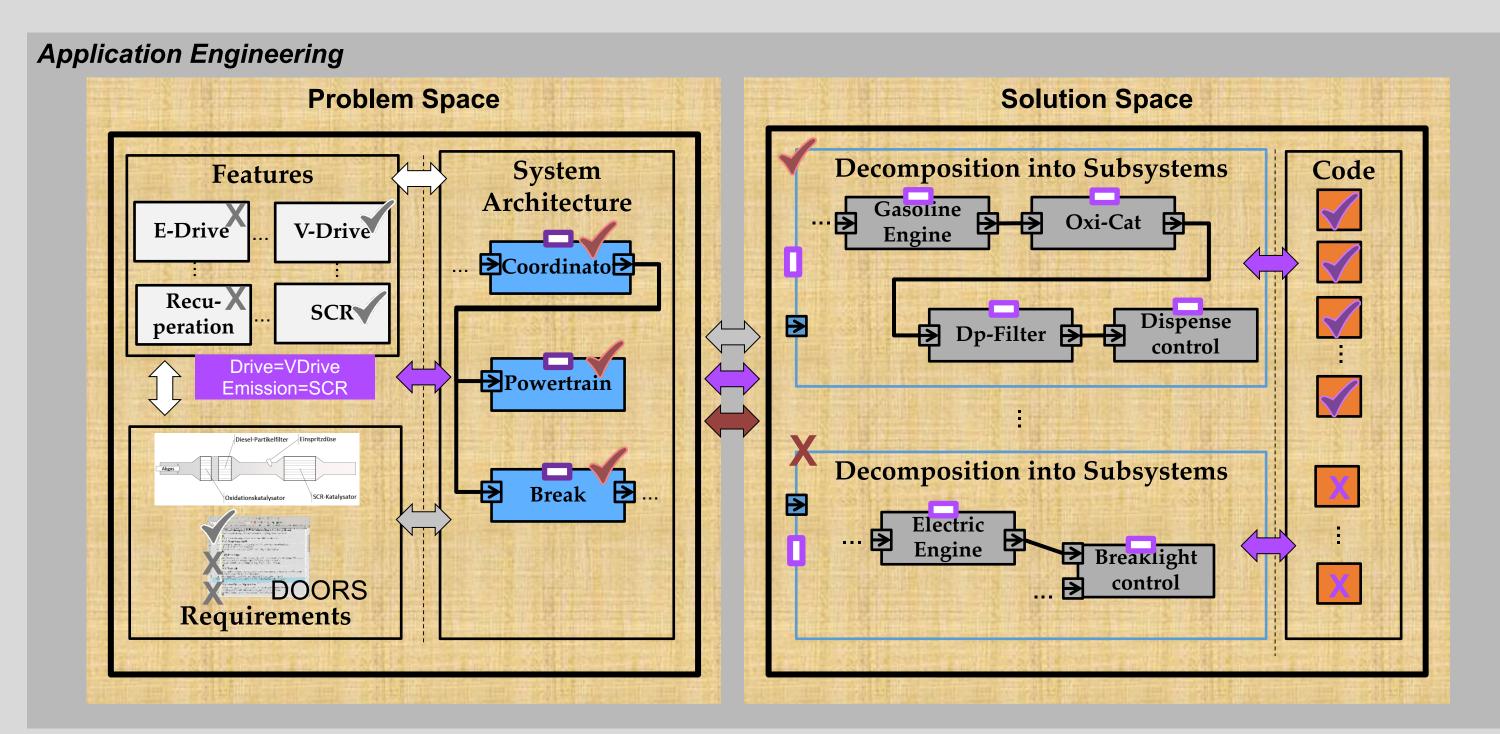
## Approach for a Product Line

Code artifacts with **implementation variability** can only be reused with great effort for the development of a system variant.



By introducing **feature and variability parameters**, models from the problem space can be mapped to models from the solution space.

Thus, **code artifacts** and **traces to requirements** can then systematically be **reused**.



#### **Application Example**

A vehicle software system must be developed in a new product variant.

For this purpose, the internal combustion engine

control, the exhaust gas purification control, and their requirements are systematically reused.

#### If you are interested in our research topics, please contact us and join our team. We are looking for YOU!

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