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SYSTEMS ENGINEERING FOR AI (SE4AI)

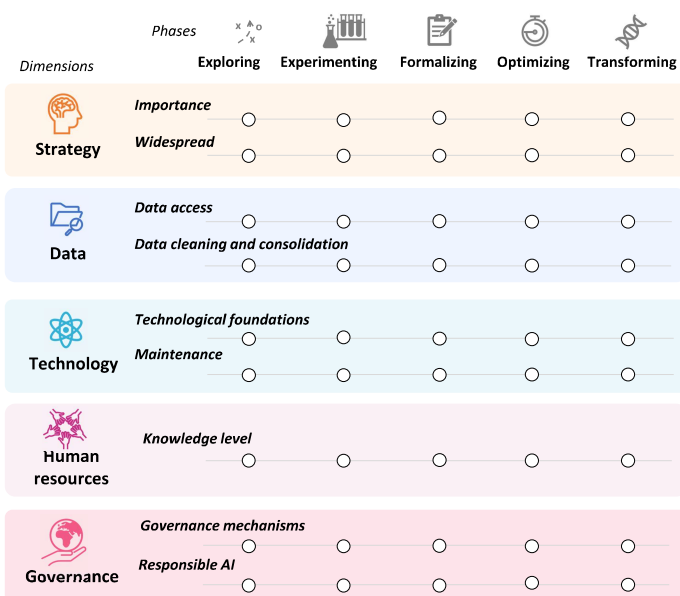
How to develop and maintain systems with AI inside?

THE ROAD TO AI MATURITY

IS YOUR ORGANIZATION READY FOR AI?

Developing systems with AI inside brings new challenges to the organization; do you have the right strategy, proper data management in place, can you maintain AI-enabled systems, do you have the right experts, can you comply with new legislation like the EU AI act?

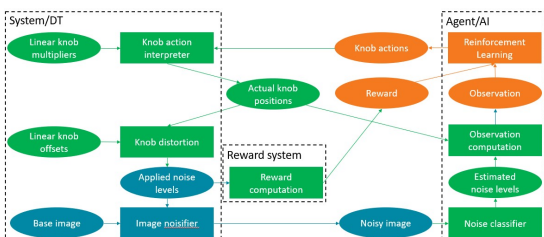
Assess the AI-maturity of your organization; 5 dimensions, 5 phases .. where are you and where do you want to be?



GETTING STARTED

EXPERIMENT: "ASIMOV in a Nutshell"

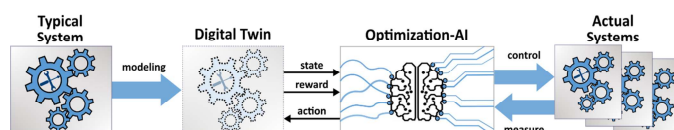
Explore the impact of digital twinning modelling decisions and the systems engineering challenges imposed by RL. The demonstrator illustrates the ASIMOV project vision in a simple setting, taking inspiration from an electron microscope case.



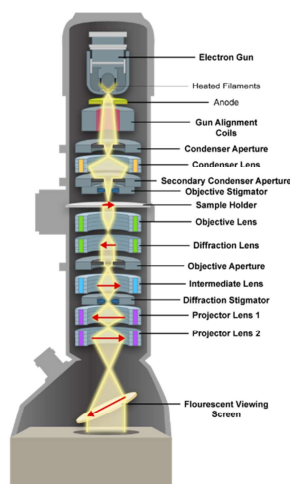
ASIMOV PROJECT

SYSTEM OPTIMIZATION USING REINFORCEMENT LEARNING (RL) AND DIGITAL TWINNING

In the ASIMOV project, we have build up experience on how to automatically optimize a system by training a RL agent using digital twinning. The digital twin provides a means to efficiently generate data for many different scenarios and train the RL agent cost-effectively and in a safe setting.



ASIMOV USE CASES



➔ UUV use case: automatic test case generation to test Unmanned Utility Vehicles

◀ TEM use case: automatic lens calibration in a Transmission Electron Microscope

READ: ASIMOV COOKBOOK

Read about the **best practices** and **lessons learned** identified by the consortium in the cookbook. It provides a starting point for system architects and system engineers that are faced with the question:

"How to build complex high-tech CPSs that select their optimal settings autonomously within minimal time and with minimal external expertise?"



REACH OUT

Let's discuss your SE4AI journey together!