

in software development by Rockwell Automation Company, and makes a research among the works of Delft Technical University on the described topic.

The paper proposes a mathematical description of modular software product architecture, which is oriented to the aviation industry.

The proposed approach allows unifying a development process, reducing the time and labor of software development, adding innovations without existing structure transformation if the software product is made using the described solution.

Keywords: software, software architecture, software architecture design, software development, flight simulation, aviation software, mathematical modeling.

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