trinity

DIGITAL DESIGN CONTENT BASED ROBOT TRAJECTORY GENERATION PRODUCTION MANAGER TUTORIAL

www.trinityrobotics.eu

Purpose of the module

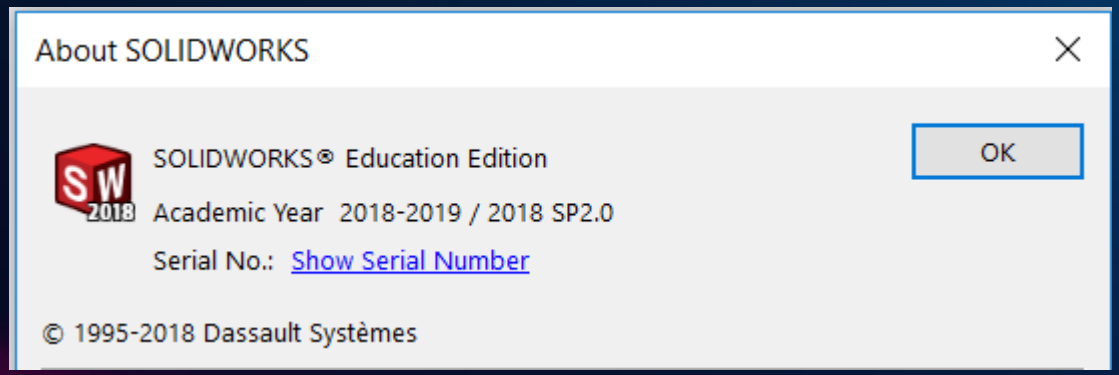
- Module provides functionality for speeding up robot simulation and programming by using data from digital design data, such as BIM.
- Purposes for this module are utilizing digital design information for robot simulation and offline programming,
- And to utilizing design data to create AR and VR environments

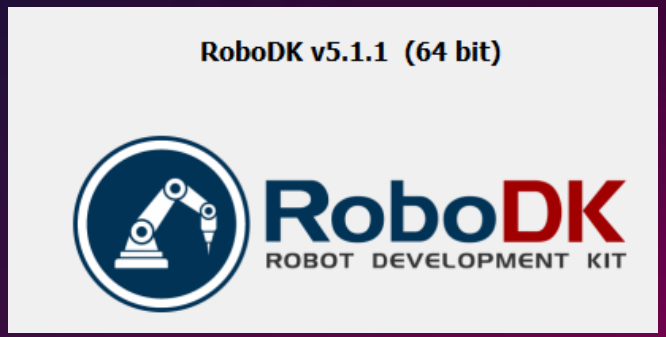
Hardware requirements

- Workstation PC
- Steam compatible VR headset and controllers such as HTC Vive

Software requirements

- Windows
- Solidworks
- RoboDK
- Unreal Engine





Preparation steps

- Integration of trajectory data into 3D model
  - Include data needed for production into product data
- Exporting data to robot simulation software
  - Configuring and utilizing Solidworks Add-in for RoboDK
- Generating trajectories for robot
  - Setting parameters for robot program
- Utilizing design data in VR and AR-experiences
  - Creating VR-experience for training and aftermarket purposes

Integration

- Module offers a flexible way of integrating data needed for robotized production into product data at early design phase
- Module can be utilized in flexible robotized production
- And for creation of VR- and AR-environments for training and aftermarket purposes

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