

## ■ RoadRunner

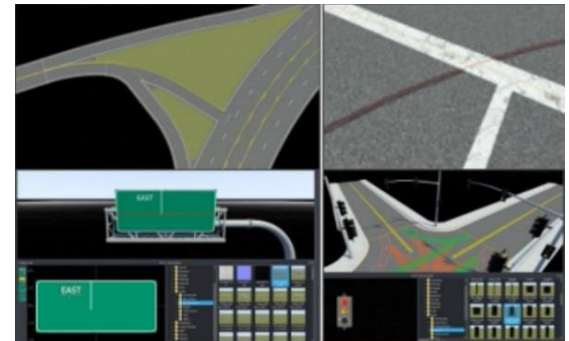
Design 3D scenes for automated driving simulation.

- Insert signs, signals, guardrails, and road damage, as well as foliage, buildings, and other 3D models
- Design complex road networks, control traffic signals at junctions, add signs and props, and modify terrain.
- Use GIS assets as a reference to construct your road network.
- Export 3D scenes to an external simulator or co-simulate with Simulink.

3D Scene design	
▪	RoadRunner
▪	RoadRunner Asset Library
Simulate with Simulink	
▪	Automated Driving Toolbox
▪	Vehicle Dynamics Blockset
▪	RoadRunner Products

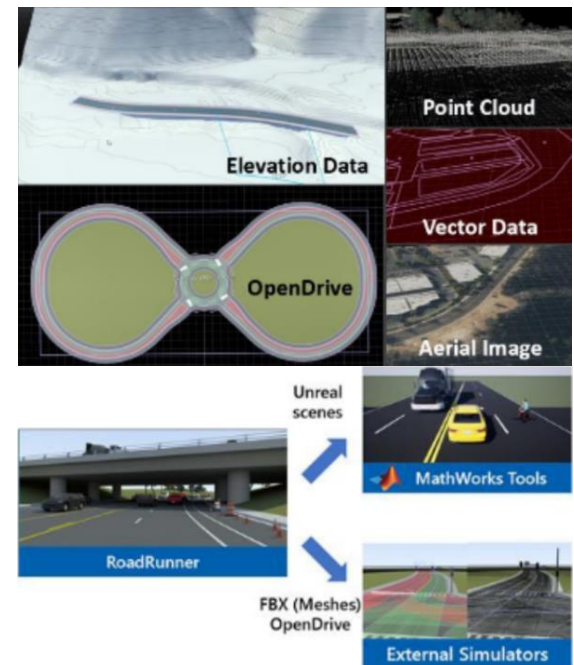
## ■ 3D Scene Modelling

- Create realistic, complex, interconnected road networks consisting of intersections, bridges, roundabouts, turnouts, and road markings.
- Create road shapes by specifying curvature, vertical slope, and blends, including cross-sectioning, banking, and crowning.
- Create road networks of varying types and shapes, modify lane properties, add road stencils and lane markings.



## ■ Import GIS

- Build 3D scenes with real locations by importing aerial imagery, elevation data, lidar point clouds, and roadmaps to accurately represent physical locations in RoadRunner.
- Automatically generate 3D road models from HD maps.



## ■ Export to Simulators

- 3D road models can be exported to OpenDrive®, FBX®, glTF™, OpenFlight, OpenSceneGraph, OBJ, and USD formats.
- Export to a variety of simulators and gaming engines, including CARLA, aiSim, Vires VTD, NVIDIA DRIVE Sim, Cognata, rFpro, Baidu Apollo, Unity, and Unreal Engine
- Co-simulate with Simulink using Automated Driving Toolbox or Vehicle Dynamics Blockset.

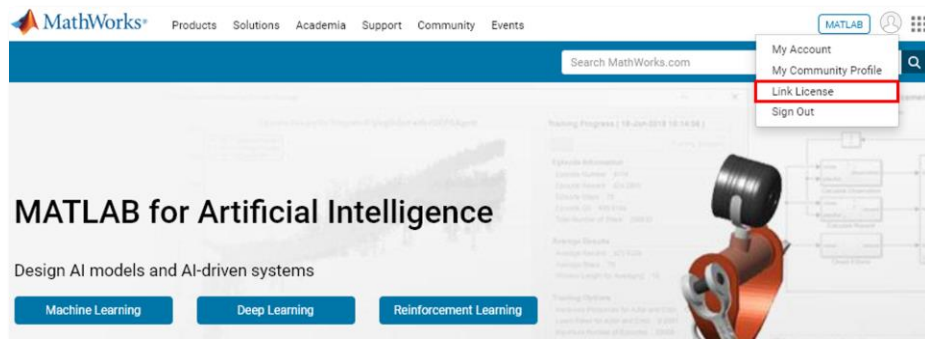
## ■ RoadRunner Asset Library

- The library provides hundreds of models, including road and highway signs, traffic signals, road surface markings, trees, barriers, and road damage textures, such as cracks and oil spills.



## ■ RoadRunner Installation Guide

- a. Login to [MathWorks](#) with your school account then press your profile button on the upper right corner. Press the **Link License** button from the drop-down menu.



- b. Enter the RoadRunner Activation Key **58987-92718-18104-13753-72658** in the box then press the **Link License** button.

### Link a License to my MathWorks Account

**License Number\* or Activation Key**

Link License

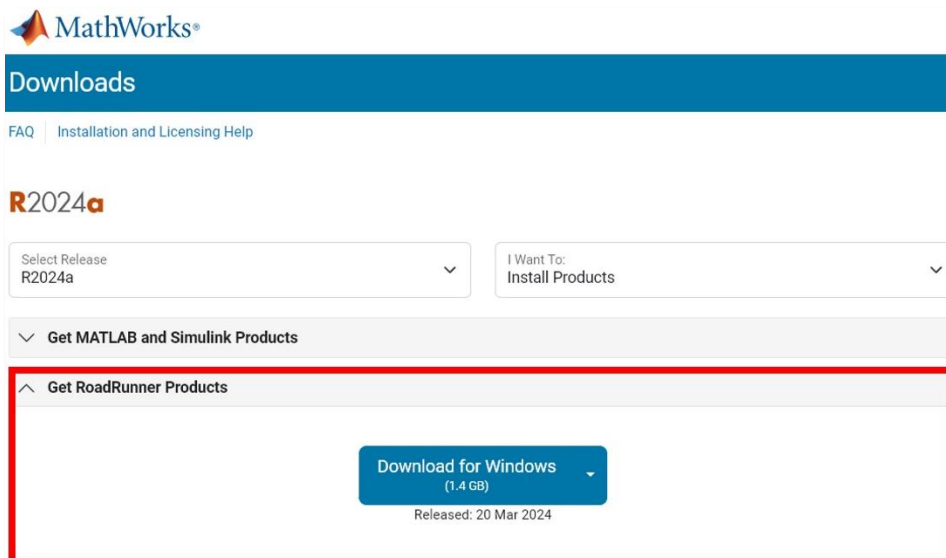
To link your organization's (school or business) license, enter the organization's license number/activation key.

Obtain your [license number](#) by running MATLAB and typing 'license' at the command prompt or contact your MATLAB administrator.

*\*To link to a work or university license, make sure your MathWorks Account ([jaeahn@mathworks.com](mailto:jaeahn@mathworks.com)) uses your work or university email. [Change email](#)*

*\*Some Licenses may require you to enter an Activation Key.*

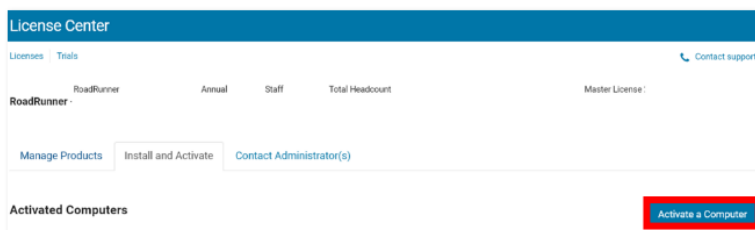
- c. Press the **Link License** button after entering the Activation Key. Then the Success box will appear confirming that the license activation was successful. Download\* the RoadRunner Installer from the [download page](#).  
*\*If it does not appear on the download page, please try again about 5~10minutes later.*



d. If this is your first time installing RoadRunner or installing it on a new device, download the license file(license.lic) from the License Center. Follow the steps below:

1. Visit the [License Center](#) > Click **RoadRunner** from the Product column
2. Press **Install and Activate** Tab > Click the **Activate a Computer** button.

Enter the details of the device that you would like to install RoadRunner then download the license file to complete the installation at a later stage.



**Manually Activate Software on a Computer**

Select software release.

**Release**

Describe computer on which software will be activated.

**Operating System**

**Host ID**

How do I find my computer's host id?

**Computer Login Name**

How do I find my Computer Login Name?

Provide a label so you can easily identify this computer later.

**Activation Label**

※ KAIST members have unlimited access not only to MATLAB, Simulink and all the toolboxes as well as RoadRunner and Polyspace Bug Finder for study and research purposes.

※ **Unauthorized(Graduates, who are no longer with the school) personnel should NOT use the Campus-Wide License and may face legal actions for the license misuse.**

### ■ Related pages

- [Help Center](#): RoadRunner Documentation
- [RoadRunner Tutorial](#): Learn basics of the RoadRunner
- [RoadRunner Videos and Webinars](#)