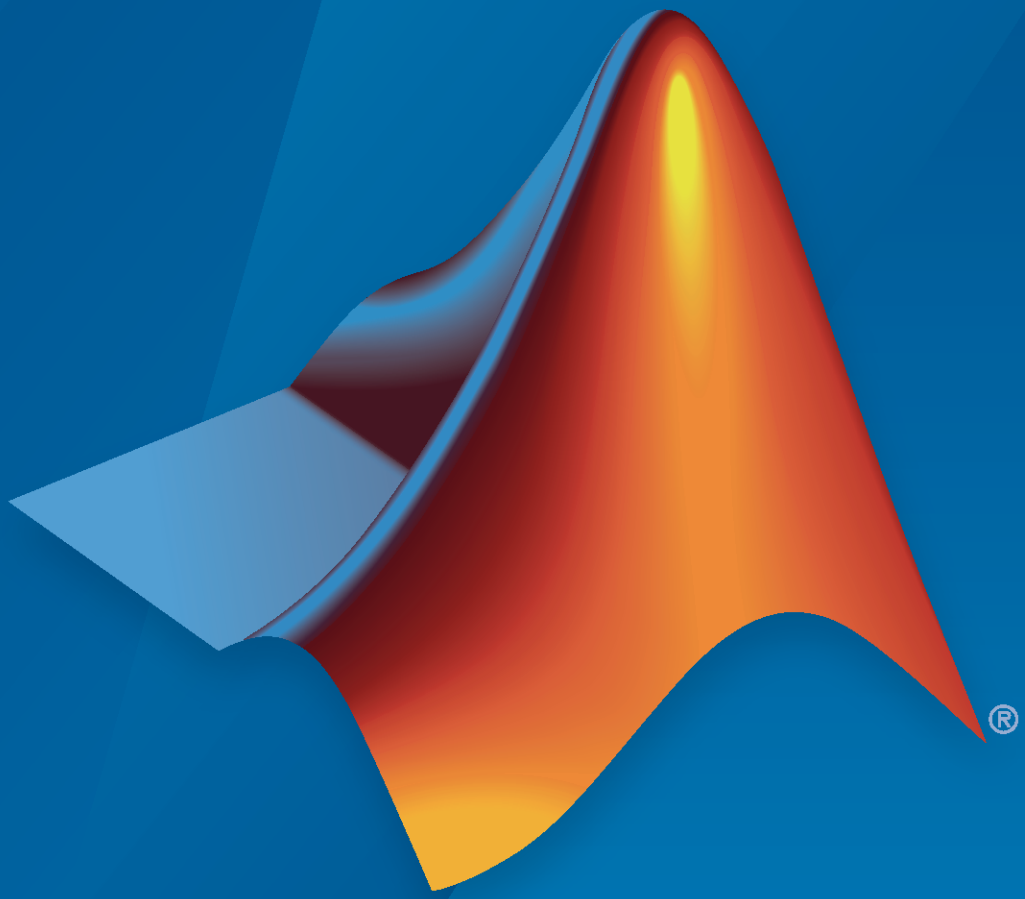
Navigation Toolbox™

Getting Started Guide



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Revision History

September 2019	Online only	New for Version 1.0 (R2019b)
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September 2020	Online only	Revised for Version 1.2 (R2020b)

Contents

1 Product Overview

. 1-1
Navigation Toolbox Product Description 1-1

Product Overview

Navigation Toolbox Product Description

Design, simulate, and deploy algorithms for planning and navigation

Navigation Toolbox™ provides algorithms and analysis tools for designing motion planning and navigation systems. The toolbox contains customizable search and sampling-based path-planners. It also contains sensor models and algorithms for multi-sensor pose estimation. You can create 2D and 3D map representations using your own data or generate maps using the simultaneous localization and mapping (SLAM) algorithms included in the toolbox. Reference examples are provided for self-driving and robotics applications.

You can generate metrics for comparing path optimality, smoothness, and performance benchmarks. The SLAM map builder app lets you interactively visualize and debug map generation. You can test your algorithms by deploying them directly to hardware (with MATLAB® Coder™ or Simulink® Coder).