spanny

Abusing mdspan is within arm's reach

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Griswald Brooks
Senior Robotics Engineer
griswald.brooks@picknik.ai

Introduction

What am I trying to convey?

Motivations for std::mdspan

Features of std::mdspan

Layout Policies

Occupancy Grids

Implementing global occupancy grid with std::vector
A conventional use case in robotics for mapping environments.

Submaps for Navigation

Rotated Submaps

Polygonal Views and Arbitrary Layouts

Conclusion of Layout Policies

Accessor Policies

Roboticists' Beer Problem

Synchronous Robot Arm Control

Synchronous Dual Robot Arms

Asynchronous Dual Arm Control

Summary of Accessor Policies

Conclusion

Thank you!

Code and slides on GitHub:
github.com/griswaldbrooks/spanny

CAD files and parts list to be published.