

# Compliant Parallel Mechanisms as Robot Fingers

Dexterous Compliant Manipulation Using Delta Arrays / 2024794 / July 24, 2020

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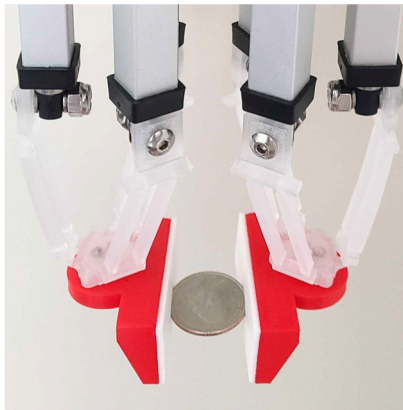
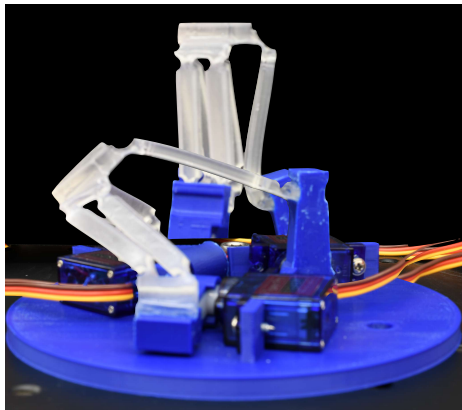
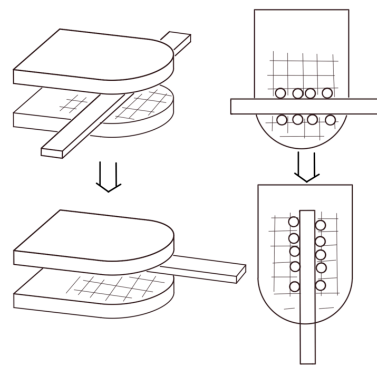
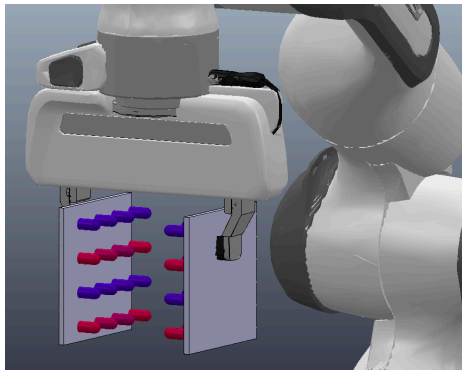
## Challenge

*Dexterous manipulation for*

- **safe,**
- **delicate,**
- **assistive** tasks

## Solution

- Arrays of compliant parallel robots with multiple DoFs
- Novel algorithms for manipulation planning



## Scientific Impact

- Human-centered design of compliant robots with embedded sensors using different modalities
- Transferable control approaches and a unified framework for coordination strategies within robot arrays

## Broader Impact

- Easy and accessible techniques to lower barriers to entry
- Human-centered approach to assistive feeding models