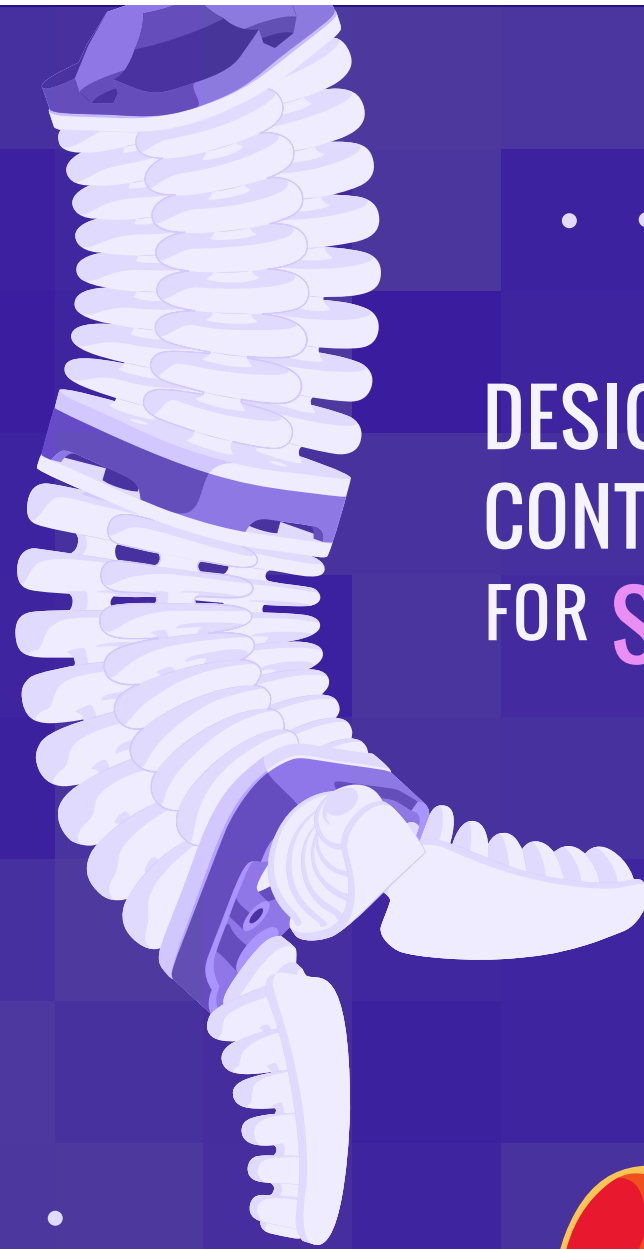




> The past two decades, the field of soft robotics has sparked significant interest among many scientific disciplines. Contrary to rigid robots, soft robots explore soft materials that significantly enhance the robot's dexterity, enable a rich family of motion primitives, and enhance environmental robustness regarding contact and impact. Since its inception, soft robotics has exemplified its potential in diverse areas such as safe manipulation, adaptive grasping, exploration under environmental uncertainty, rehabilitation, and the biomimicry of many animals. By exploring the uncharted versatile nature of soft materials, soft robotics paves the way towards achieving biological performance in modern-day robotics. This thesis aims to further the advances in soft robotics by addressing some of the open multidisciplinary challenges within this (currently) young field of research.

DESIGN, MODELING, AND CONTROL STRATEGIES FOR SOFT ROBOTS



# DESIGN, MODELING, & CONTROL STRATEGIES FOR **SOFT ROBOTS**

## INVITATION

You are cordially invited to the public defense of my Ph.D. dissertation:

Design, Modeling, & Control Strategies for Soft Robots

Wednesday,  
January 10, 2024  
at 16h00

Eindhoven University  
of Technology (TU/e)  
Atlas building  
Room 0.710

Brandon Caasenbrood

Paranymphs:  
Bob van de Voort  
Gijs Akkermans

Brandon Caasenbrood



Brandon Caasenbrood