

Anthrobotics lab

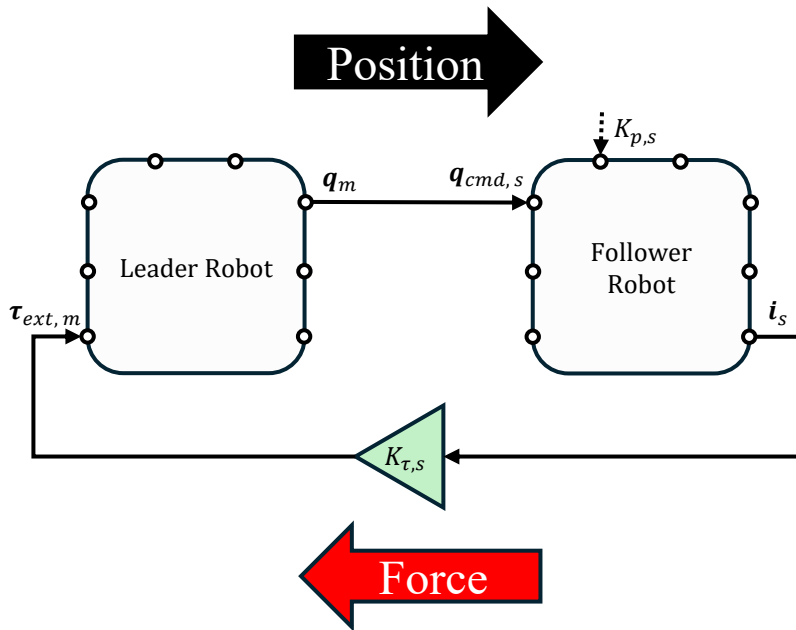
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Bilateral Teleoperation



Key features and benefits

- Real-time haptic feedback
- Capture of expert tactile skills

Data collected here will be used to train robots to do household chores

Watch the full demo here

<https://www.youtube.com/watch?v=qw80AsuF9e8>

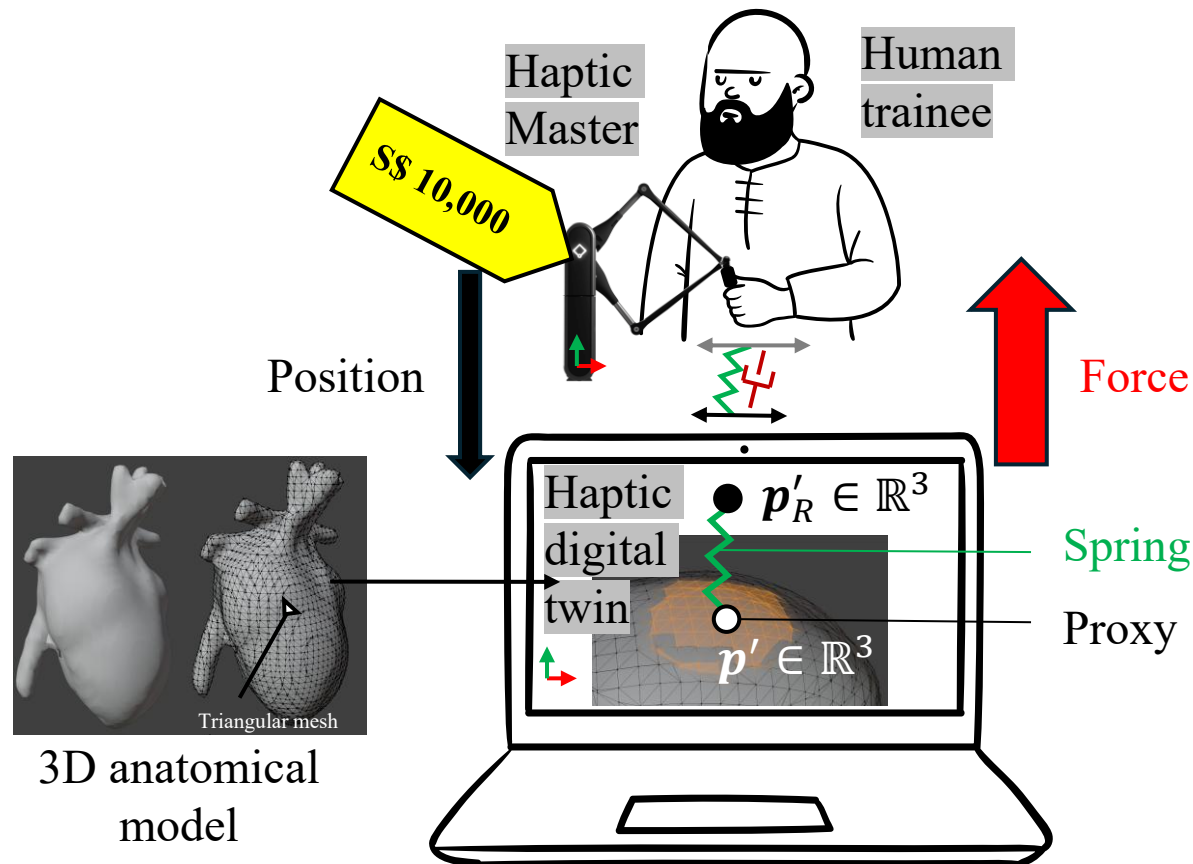


S\$ 8,000

Visit us at C4.03 for a trial

Ongoing Capstone project
Brekkie Bot: Breakfast-Prep Assistant for functional independence among Seniors

Haptic Digital Twins



Mohan, Dhanya Menoth, Bijan Shirinzadeh, Julian Smith, Yongmin Zhong, **Sri Harsha Turlapati**, and Domenico Campolo. "A review of recent methods and applications of virtual fixtures in robot-assisted surgery." *Computers in Biology and Medicine* 199 (2025): 111294.

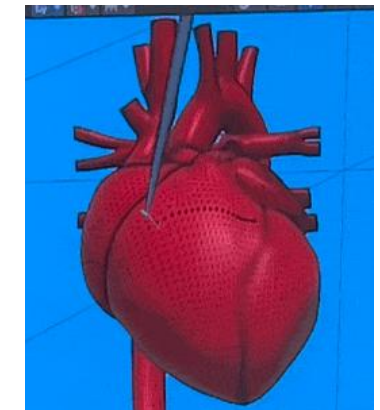
Key features and benefits

- Real-time haptic feedback
- Capture of expert tactile skills
- Safe, repeatable practice
- Reduced reliance on cadavers
- Lower training costs and resource use



Position

Force



Digital twins allow for lower training costs and assist surgeons-in-training when they err



Anthrobotics Lab @ SUSS

Human-Centred Robotics for Social Impact

- **Human skill capture & robot learning**
 - haptic demonstrations, teleoperation and datasets
- **Human-robot interaction**
 - shared control and haptic assistance
- **Assistive & service robotics**
 - eldercare, household/kitchen tasks, food-service
- **Healthcare & applied learning**
 - haptic digital twins, surgical training

Thanks for your time!