Ruixuan Li

Tel: +86 15153319908; +32 486461933

Email: ruixuan.li@kuleuven.be; liruixuan676522@gmail.com

EDUCATION

KU Leuven | PhD | Funded by FWO scholarship Research topics: robot-assisted surgery, ultrasound navigation	05.2020-11.2024
KU Leuven | M.sc.| Electromechanical Engineering	09.2018-02.2020
KU Leuven | B.sc. | Electromechanical Engineering	09.2016-09.2018
Southwest Jiaotong University | B.sc. | Mechanical Design, Manufacturing and Automation	09.2014-09.2018

RESEARCH EXPERIENCES

Postdoctoral mandates (PDM) at KU Leuven	04.2025-10.2025
Postdoctoral Research Fellow Funded by FWO grant at KU Leuven	11.2025-10.2028

ACTIVITIES & INTERNSHIP

Participate in KUKA Innovation Award 2025 | Final list (top 5)	06.2024-Present
Participate in Functionally Accurate RObotic Surgery (FAROS) Funded by EU H2020 ICT	01.2021-06.2024
Short term exchange in University of Zurich Funded by FWO travel grant	03.2023-05.2023
Internship in Edison Engineering Development Program GE Healthcare	07.2019-09.2019

PUBLICATIONS

1. **Li, R.**, Davoodi, A., Timmermans, M., et al. with **Li, R.** (first author, corresp. author) (2024). Ultrasound-Based Robot-Assisted Drilling for Minimally Invasive Pedicle Screw Placement. IEEE Transactions on Medical Robotics and Bionics, 6 (3), 818-828.
2. Cai, Y., **Li, R.**, Davoodi, A., Ourak, M., Deprest, J., Vander Poorten, E. with Cai, Y. (first author), **Li, R.** (joint first author) (2024). Autonomous Robotic Ultrasound Approach for Fetoscope Tracking by Fusing Optical and 2D Ultrasound Data. IEEE Robotics and Automation Letters, 9 (9), 7573-7580..
3. **Li, R.**, Davoodi, A., Cai, Y., et al. with **Li, R.**, (first author, corresp. author) (2023). Robot-assisted Ultrasound Reconstruction for Spine Surgery: from Bench-top to Pre-clinical Study. International Journal Of Computer Assisted Radiology And Surgery, 18 (9), 1613-1623.
4. **Li, R**., Cai, Y., Davoodi, A., Borghesan, G., Vander Poorten, E. with Li, R. (joint first author, corresp. author) (2025). 3D Ultrasound Shape Completion and Anatomical Feature Detection for Minimally Invasive Spine Surgery. Medical & Biological Engineering & Computing, 1-14.
5. Vörös, V., **Li, R.**, Davoodi, A., Wybaillie, G., Vander Poorten, E., Niu, K. (2022). An Augmented Reality-Based Interaction Scheme for Robotic Pedicle Screw Placement. Journal of Imaging, 8 (10), Art.No. 273.

SKILLS & INTERESTS

Language:

Chinese: mother tongue

English: excellent written and communication

ICT:

Skilled in the use of ROS, VTK, OpenCV, Open3d, Solid works, Python and C++