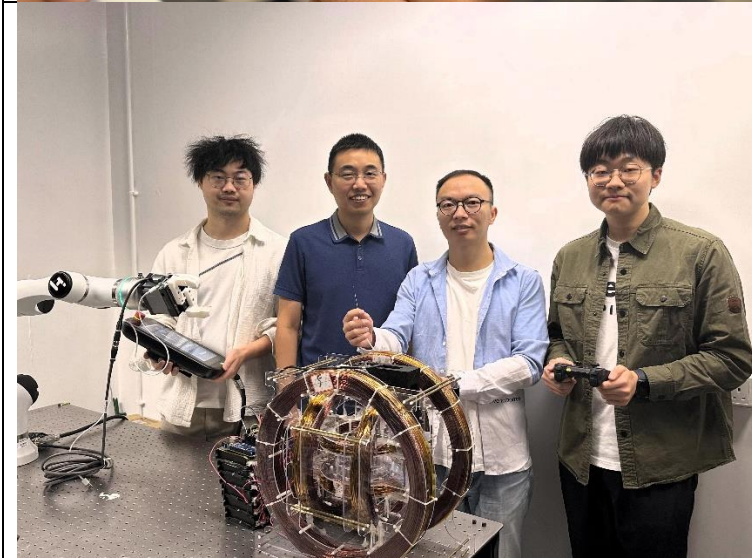
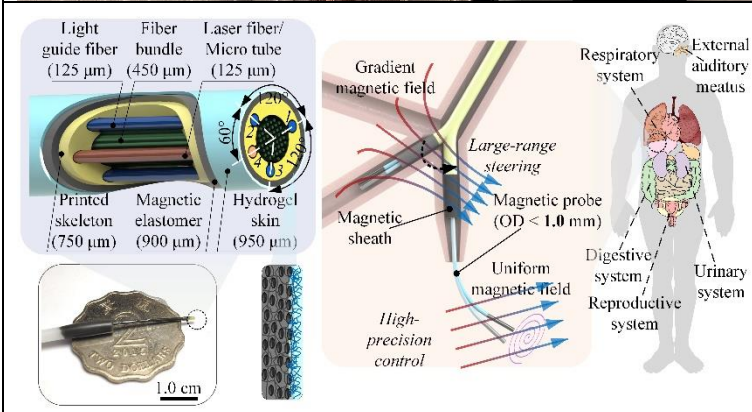


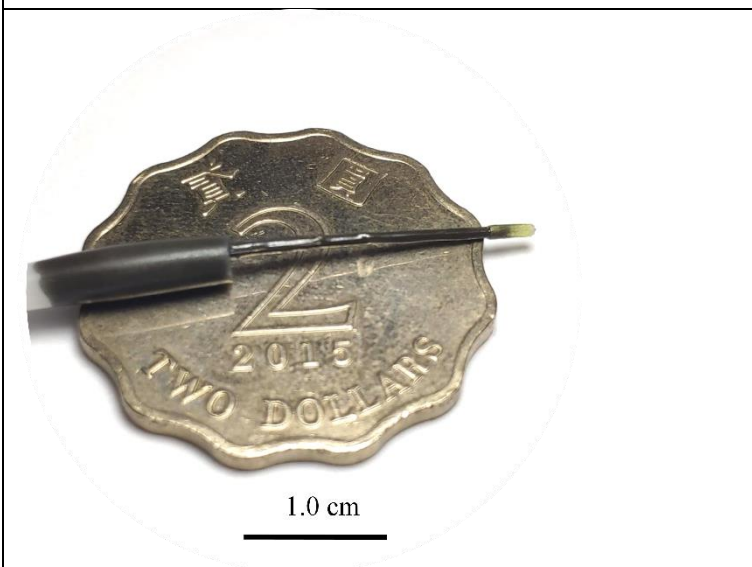
Researchers from the School of Engineering of HKUST develop the world's smallest multifunctional biomedical robot which has a slim profile of just 0.95 mm.



The research team, led by Prof. SHEN Yajing (second left) from the Department of Electronic and Computer Engineering, has designed an optical fiber-based submillimeter continuum robot for interventional treatment in narrow cavities, which looks like a small tube as the one held by Dr. ZHANG Tieshan (second right) in the photo. The devices held by Dr. YANG Xiong (first left) and ZHAO Haoxiang (first right) serve as controllers for the robot arm and the magnetic field, respectively.



The schematic in the top left of the picture shows the structure of the robot's probe tip, which boasts a diameter contour of 0.95 mm, as seen in the prototype in the bottom left. Its potential uses in medical diagnosis and treatment are demonstrated in the diagram on the right.



The prototype of the submillimeter continuum robot over a two-dollar Hong Kong coin.