Stanford



Edward Chan

Life Science Research Professional 1, Surgery - Plastic and Reconstructive Surgery

Bio

BIO

CURRENT PROJECT

Our team is developing a novel imaging-driven autonomous surgical robotic platform to perform incision-free in-situ tissue editing.

EXPERIENCE

- * High-performance ASIC/FPGA design in VHDL/Verilog
- * Robust, high-precision control systems for robotic actuation
- * Cloud/mobile-based information platforms in Python/NodeJS

AREAS OF INTEREST

- * Co-registered MRI/CT with RT visual and ultrasound imaging
- * Modeling frameworks for soft tissue deformation
- * Level 3 autonomous surgical robotics
- * Ultrashort pulse laser tissue ablation
- * Wide-spectrum laser imaging