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Born May 9, 1974

### Career

2006-present Assistant Professor, Tokyo Institute of Technology

### Research Interests

Rescue robotics, Remote controlled mobile robotics, Mechanical design of medical tools

### Honors

- Young Investigation Excellence Awards from the Robotics Society of Japan, 2005
- Best Conference Paper Award from the Japan Society of Computer Aided Surgery, 2005
- Best Paper Awards from the Robotics Society of Japan, 2006

### Activities/Competence

- Member of the Robotics Society of Japan
- Member of the Japan Society of Computer Aided Surgery
- Member of the Japan Society of mechanical Engineers

### Most Important Relevant Publications (Selected):

- [1] **Toshio TAKAYAMA**, Shigeo HIROSE; "Development of Souryu-I -Connected Crawler Vehicle for Inspection of Narrow and Winding Space-", Proceeding of the IECON-2000, Nagoya, October 2000, pp143-148
- [2] **Toshio TAKAYAMA**, Shigeo HIROSE; "Amphibious 3D Active Cord Mechanism HELIX with Helical Swimming Motion", Proceeding of the IROS 2002, Lausanne, October 2002, pp775-780
- [3] **Toshio TAKAYAMA**, Shigeo HIROSE; "Development of "Souryu I & II" -Connected Crawler Vehicle for Inspection of Narrow and Winding Space-", Journal of Robotics and Mechatronics, Vol15, No.1, Feb.2003, pp61-69
- [4] **Toshio TAKAYAMA**, Shigeo HIROSE; "Study on 3D Active Cord Mechanism with Helical Rotational Motion", Journal of the Robotics Society of Japan, Vol. 22, No. 5, July 2004, pp625-635 (In Japanese)
- [5] **Toshio TAKAYAMA**, Masayuki ARAI, Shigeo HIROSE; "Development of Connected Crawler Vehicle "Souryu -III" for Rescue Application", Proceeding of the 22nd Annual Conference of The Robotics Society of Japan, Gifu, November 2004, 3A16 (In Japanese)
- [6] **Toshio TAKAYAMA**, Toru OMATA, Naofumi TANAKA, Kazuyuki KOJIMA; "Separable pursestring suture instrument for laparoscopic surgery", Proceeding of the 14th Annual Conference of The Japan Society of Computer Aided Surgery, Chiba, December 2005, 05(I)-5 (In Japanese)
- [7] **Toshio TAKAYAMA**, Takashi FUTAMI, Toru OMATA, Hideki AKAMATSU, Toshiki OHYA, Kazuyuki KOJIMA, Kozo TAKASE & Naofumi TANAKA; "Abdominal cavity Hand for Minimally Invasive Surgery", Proceeding of the 2006 JSME Conference on Robotics and Mechatronics, Tokyo, May 2006, 1A1-A07 (In Japanese)
- [8] **Toshio TAKAYAMA**, Toru OMATA, Naofumi TANAKA, Kazuyuki KOJIMA; "Development of separable pursestring suture instrument", Proceeding of the 1st International Medical-Engineering Joint Biomechanics Symposium, Tokyo, July 2006, pp11-13 (In Japanese)