Publications


(These are extracted from published papers in 2011. Other publications can be seen on the laboratory website).

Access

Campus Map of Mie University & Access Routes to Mie University

Campus Map of Faculty of Engineering

Contact

Department of Mechanical Engineering, Faculty of Engineering, Mie University

Websites

Mechatronics Laboratory: http://www.robot.mach.mie-u.ac.jp/en/
Faculty of Engineering, Mie University: http://www.eng.mie-u.ac.jp/en/

We will participate in TEPIA this year.

Upper-Limb Motion Assist Robot(Active Cast) will be in permanent exhibition at TEPIA (in Aoyama, Tokyo).
MECHATRONICS LABORATORY
Dept. of Mechanical Engineering,
Mie University

Creation of Social Support Systems aiming at Human Machine Symbiosis

- Creation of Intelligent Mechanical Systems
- Development of Human Support Technology
- Elucidation and Innovation of Human Functions

Research Targets

Machine systems and robots that can realize harmonious human-machine coexistence include intelligent robots that have ability to "judge" and "learn," and human support robots to assist humans with dangerous or difficult tasks. In Mechatronics Laboratory, we aim to develop robot control technology to realize human-machine coexistence, and also create machine systems and intelligent robots to contribute to the society.

Our research theme covers basic study, development of human machine interface using biological signals and development of haptic systems that improve force sensing and touch sensing ability of human; and implementation study: development of medical and welfare robots that help disabled persons to live more independently and have functional recovery and development of product-making robots available for highly accurate machining and welding.

We especially focus our efforts on collaborative research between industry and academia, and form collaborative project teams to conduct joint research concerning optimization of producing process of Sokeizai such as auto parts, and development of the human support robots in the field of medical service and welfare.

In future, we will further put our efforts on: in the field of medical service and welfare, development of medical and welfare robot technology to overcome the super-aging society we will face in the near future; in the field of product-making, development of product-making support technology that provide world-class quality and performance.

To achieve the goal of creating new industry, we will particularly try to expand our original technologies for optimization of fluid behavior into the field of life and medical service such as regenerative medicine and drug discovery process, and into the field of design optimization of molds and shape optimization of products which are the core manufacturing technology.

Members

Professor : Dr. Kenichi Yano
Associate Professor : Dr. Norihiko Kato
Assistant Professor : Dr. Hirokazu Matsu
Senior Researcher : Dr. Naoki Tsubo (Nihon University College of Technology)
Dr. Ryota Sakamoto (Fukuoka University, Mie University)
Dr. Yoshifumi Kusumoto (Kagawa National College of Technology)
Technical Assistants : Riho Inoue
Takashi Shi
Secretary : Hidetoshi Takahashi
PhD Students : Tatsuko Oda (1st year)
Kensuke Kanzawa (6th year)

MS Students (2nd year) :
Takaya (Inoue)
Naito (Kusumoto)
Ryotaro Kusumoto
Yoshihiro Shi
Kazuya Tamura
Hiroki Nakanishi
Tamao Shibata
Takashi Hosokawa
Nico Maru
Kei Miyata

MS Students (1st year) :
Yusuke Inoue
Tomoyuki Kusumoto
Hiroshi Kajita
Takayoshi Ishi
Kohei Yamaoka
Hiroshi Tanaka
Research Student: Yuki Takagi

Undergraduate Students (4th year) :
Takao Saito
Yuki Inoue
Satoshi Ohashi
Kohei Ono
Shinya Takahashi
Tasuku Sato
Yuki Murai
Takahiro Yamamoto