

## Curriculum Vitae

Kenji Kawashima

Affiliation

**Professor**

**Department of Information Physics and Computing**

**School of Information Science and Technology**

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Birthday July 29 1968 male married



### **Educational History**

B.S. Tokyo Institute of Technology, Department of Control Engineering (1992)

M.S. Tokyo Institute of Technology, Department of Control Engineering (1994)

Ph.D. Tokyo Institute of Technology, Department of Control Engineering (1997)

### **Professional Experience**

1997-2000 Research Assistant, Tokyo Metropolitan College of Technology

2000-2013 Associate Professor, Precision and Intelligence Laboratory, Tokyo Institute of Technology

2007 Visiting Scholar, Bio robotics Lab. Department of Electrical Engineering,  
University of Washington

2013- 2020 Professor, Institute of Biomaterials and Bioengineering,  
Tokyo Medical and Dental University

2014 Funded University Start-up Riverfield Inc. Chairman

2020- Professor, Department of Information Physics and Computing,  
School of Information Science and Technology, The University of Tokyo

### **Research Interest**

Medical Systems, Robotics, Control and Measurement of Fluid System

### **Membership in Learned Societies**

IEEE

ASME

The Japan Society of Mechanical Engineers (JSME)

The Robotics Society of Japan (RSJ) (The board of trustees 2006)

The Japan Society of Instrumentation and Control Engineers (SICE)

The Japan Society for Precision Engineering

Japan Society for Endoscopic Surgery

Japan Society of Computer Aided Surgery (The board of trustees since 2014)

The Japan Fluid Power System Society (Director since 2013)

## **Awards**

Hasunuma Best Paper Award, The Japan Society of Instrumentation and Control Engineers, 1998, 2006  
Best Paper Award, Japan Fluid Power Technology Promotion Foundation, 1998, 2004  
Tokyo Tech Award for Challenging Research, 2006  
Best Paper Award, The Japan Fluid Power System Society, 2007  
Best Paper Award, Japan Society of Computer Aided Surgery, 2014

## **Societal Professional Activities**

SICE2011, SICE2012, Track chair  
FLUCOME 2013 (Fluid Control, Measurements and Visualization), Committee member, Secretary  
ICPT (International Conference on Positioning Technology) 2014, Program Chair  
Founded university startup Riverfield Inc. 2014, Chairman since 2014  
The 9th JFPS International Symposium on Fluid Power 2017, General Committee  
ICPT (International Conference on Positioning Technology) 2016, Program Chair  
The 10th JFPS International Symposium on Fluid Power 2017, Organized Committee  
ICPT (International Conference on Positioning Technology) 2020, Program Chair  
IEEE IROS (International Conference on Intelligent Robots and systems) 2017, 2018, Associate Editor  
IEEE ICRA (International Conference on Robotics and Automation) 2019, Associate Editor  
Sensors and Materials 2019, Guest Editor, Special Issues on Sensing in Medical Robots

## **Recent Publication**

### **Refereed Archival Journal Publications**

Toshihiro Tagami, Tetsuro Miyazaki, Toshihiro Kawase, Takahiro Kanno, Kenji Kawashima, Pressure Control of a Pneumatic Artificial Muscle including Pneumatic Circuit Model, IEEE Access, Vol.8, pp.60526-60538, 2020

Taku Iwai, Takahiro Kanno, Tetsuro Miyazaki, Daisuke Haraguchi, Kenji Kawashima, Pneumatically Driven Surgical Forceps Displaying a Magnified Grasping Torque, The International Journal of Medical Robotics and Computer Assisted Surgery, e2015, 2020

Kenji Kawashima, Takahiro Kanno, Kotaro Tadano, Robots in laparoscopic surgery: Current and future status, BMC Biomedical Engineering, 1:12, pp.1-6, 2019

Osamu Azami, Daisuke Morisaki, Tetsuro Miyazaki, Takahiro Kanno, Kenji Kawashima, Development of the extension type pneumatic soft actuator with built-in displacement sensor, Sensors & Actuators: A. Physical, vol. 300, 111623, 2019

Ryoken Miyazaki, Kohei Hirose, Yoshiya Ishikawa, Takahiro Kanno, Kenji Kawashima, A Master-Slave Integrated Surgical Robot with Active Motion Transformation using Wrist Axis, IEEE/ASME Transactions on Mechatronics, Vol.23, Issue 3, pp.1215-1225, 2018

Kengo Watanabe, Takahiro Kanno, Kazuhisa Ito, Kenji Kawashima, Single Master Dual Slave Surgical Robot with Automated Relay of Suture Needle, IEEE Transactions on Industrial Electronics, Vol.65, Issue 8, pp.6343-6351, 2018

total 132 journal papers written in English and Japanese (Oct. 2020)