Degree Programs in Systems and Information Engineering
Graduate School of Science and Technology

Faculty member list (5-year doctoral program)

＜Doctoral Program in Empowerment Informatics＞

Research Field	Faculty Members	Detailed Description of Research Field
Supplementation	AIYAMA Yasumichi	Human-like Dexterous Robot Manipulation, Advanced Industrial Robot, co-bot (human collaboraive robot).
	UTSURO Takehito	Natural Language Processing, Web Mining, Information Retrieval, Human-Machine Communication by Speech and Language, Understanding and Creating Entertainment and Educational Contents, Language Processing by Deep Learning, Artificial Intelligence.
	KURODA Yoshihiro	Interactive Biological Media, Medical Artificial Intelligence, Medical System.
	SUZUKI Kenji	Artificial Intelligence, Autonomous Humanoid Robot, Human Assistive Technology, Music & Sound Media Technology, Kansei Research.
	MORITA Masahiko	Brain-like Computing, Neural Networks, Modeling Brain Functions.
	YANO Hiroaki	Cooperative VR Environment, Virtual Reality, Assistive Technology.
	IZAWA Jun	Computational Neuroscience, Motor Control and Learning, Neural Decoding, VR Rehabilitation Robot, Stroke Simulator, Decision Making.
	KAWASAKI Masahiro	Neuroscience, Cognitive Science, Psychology, Communication, Signal Processing.
	KAWAMOTO Hiroaki	Integration of Human and Robot, Biological Control Systems, Biological Motion & Physiology Analysis, Robot Therapy, Robot Safety.
	TANAKA Fumihide	Social Robotics, Feel Safe AI, Feel Safe Technologies, Human-Robot Interaction, Education Support, Development and Learning, Active Seniors.
	【OSAWA Hirotaka】	Human-Agent Interaction, Artificial Intelligence, Human Interface, Communication Game, Engineering Ethics, Technology in Science Fiction.

Research Field	Faculty Members	Detailed Description of Research Field
Supplementation	【PUENTES Sandra】	Cybernics, Clinical Gait Analysis, Motor Disturbances, Wearable Robot.
	【ZEMPO Keiichi】	Augmentation of Human Perception, Sense Substitution, Disability Support, Human Augmentation Engineering, Big Data Utilization and Integration on Sensor Signals.
	【HASHIMOTO Yuki】	Tactile Interface, Tactile Perception, Interactive Technique, Virtual Reality, Telexistence.
	【HACHISU Taku】	Haptics, Touch, Wearable Device.
	【HIROKAWA Masakazu】	Artificial Intelligence, Human-Machine Cooperation, Robotics for Developmental Support, Sports Engineering.
	【Hassan Modar】	Cyber-physical interfaces, Wearable technology, Mechatronics, Human performance
Harmony	KOGA Hiroki	Information Theory, Information Security.
	TSUBOUCHI Takashi	Self-Contained Autonomous Mobile Robots, Outdoor Autonomous Mobile Vehicles.
	YABUNO Hiroshi	Nonlinear Mechanical Systems, Nonlinear Control of Nano-Micro Machines, Bifurcation Control and its Applications.
	EBIHARA Tadashi	Communication and Information Engineering, Communication System, Oceanic Engineering, Network Engineering, i-Construction, Sensor Grid, Environmental Sensing, Applied Physics (Ultrasonic/Optical), Agricultural and Food Engineering, Animal Health Monitoring.
	SAKAINO Sho	Mechatronics, Haptics, Manipulation.
	DATE Hisashi	Model Predictive Control for Nonlinear Systems, Autonomous Mobile Robot, Self-Driving System, Snake-LikeRobot and Mechanical System Design.
	HASEGAWA Manabu	System Modeling.
	WAKATSUKI Naoto	Simulation based Visualization, Vibration Sensors and Actuators, Acoustical Engineering, Musical Acoustics, Inverse Problems.
	【NIIZATO Takayuki】	Emergence, Learning and Collective Behavior.
	【KAWAI Shin】	Control Theory, Discretization, Descriptor System
	【SHIBUYA Takeshi】	Machine Learning, Reinforcement Learning, Multi-Agent System including Hardware Components.

Research Field	Faculty Members	Detailed Description of Research Field
Harmony	【MAEDA Yuka】	Non-invasive Measurement by Photoplethysmography, Developing Wearable Devices for Home Healthcare System.
	【YAMAGUCHI Tomoyuki】	Instrumentation Engineering, Robotics, Robot's Eye, Human Interface, Image Processing.
	【NGUYEN Van Triet】	Digital Control, Electrical Power System, Smart Power Router.
	【IENAGA Naoto】	Life / Health / Medical informatics, Aquatic bioproduction science, Medical systems - Machine Learning, Computer Vision, Computer Science
Extension	KAMEDA Yoshinari	Mixed Reality, Massive Sensing, Intelligent Image Understanding and Processing, Advanced Measurement of VR Experience, Intelligent Support in Traffic Transportation, e-Learning.
	NAKAUCHI Yasushi	Human-Robot Interaction, Intelligent Environments, Sensor Network.
	HOSHINO Kiyoshi	Biomedical Measurement and Analysis, Mathematical Models for Biological System, Contextual Reasoning, Martial Arts, Robotics, Brain Science.
	KAKEYA Hideki	3D Imaging, Information Display, Geometric Optics, Computer Aided Surgery, Media Technology, Natural Language Processing.
	KITAHARA Itaru	Real World Imaging, Free-Viewpoint Video, Mixed-Reality, Augmented Reality.
	NOBUHARA Hajime	Computational Intelligence, Multimedia Processing, Advanced Sensing by UAV.
	HOSHINO Junichi	Entertainment Computing, Game Technologies, Storytelling Technologies.
	MOCHIYAMA Hiromi	Soft Robotics, Haptics Technology.
	【SHISHIDO Hidehiko】	Computer Vision, Image Media Processing, Sports Science.
	【TAKATANI Tsuyoshi】	Computational Imaging, Computer Graphics, Appearance Fabrication

(Note)

Before applying, applicants must contact a faculty member and obtain consent to become their prospective supervisor (the person who gives academic instructions after enrollment).

Applicants cannot choose faculty members whose names are written in square brackets as a prospective supervisor. However, under the supervision of a faculty member without square brackets, they can choose a faculty member with square brackets as a sub-supervisor and conduct research related to the sub-supervisor's research topics.