

**CENTER FOR ARTIFICIAL
INTELLIGENCE RESEARCH**

筑波大学 人工知能科学センター

2024-2025



About C-AIR



The University of Tsukuba has established the Center for Artificial Intelligence Research (C-AIR) to foster groundbreaking research projects in the field of Artificial Intelligence.

This center works as a hub for Interdisciplinary Research, fostering cooperation between different departments in the university, centered around the application of interdisciplinary Big Data.

In particular, the center promotes the research of “Human-supporting Artificial Intelligence” for the realization of the next generation smart communities. To this end, C-AIR forms a spiral from basic scientific research to practical and industrial applications, which is achieved through the collaboration with various research institutes and companies.

Message from the Director

The Center for Artificial Intelligence Research (C-AIR) was founded in April, 2017. Because modern research in Artificial Intelligence (AI) requires the collaboration of different fields, and leads to diverse applications in society, it was necessary for the university to construct a structure to facilitate cross-disciplinary research and education activities.

At this center, we employ the interdisciplinary nature of our university to assemble a network of research centers and research projects from different fields, conducting basic and applied research on AI.

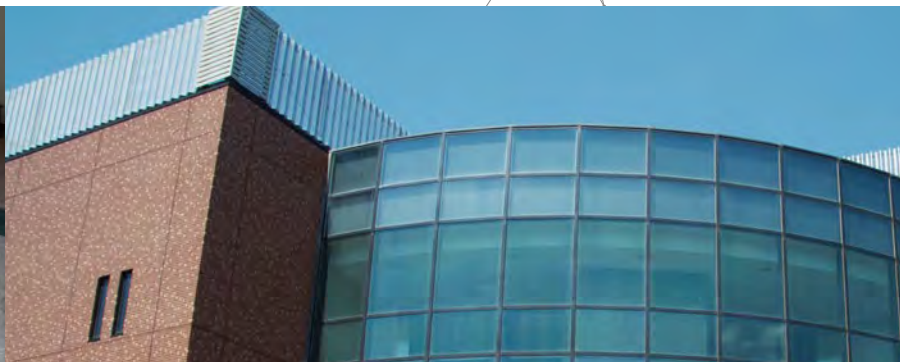
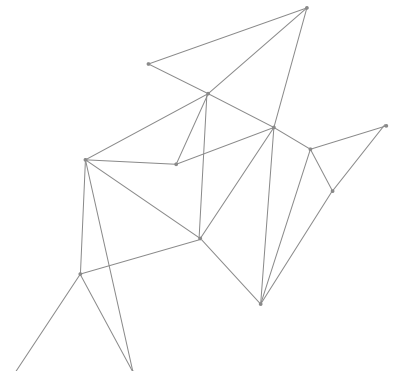
We also actively pursue industry-university collaboration initiatives in order to allow the AI technology developed on campus to provide concrete benefits to society.

It is also an important task to foster new human resources capable of developing AI and advanced knowledge of data analysis and putting it into practical applications. In this sense, we plan to develop activities that contribute to improving the research skills of researchers at companies and other members of society.



Kazuhiro Fukui

Director of Center for Artificial
Intelligence Research,
University of Tsukuba



Organizational Structure

The C-AIR is composed of the “Artificial Intelligence Infrastructure Research Division” and the “Project Research Division.”

In the Artificial Intelligence Infrastructure Research Division, we conduct basic research on fundamental fields of AI, such as machine learning, mathematical algorithms, quantum system information, big data analysis, cloud infrastructure, and privacy protection. In addition to these, we also conduct research on fundamental technologies that support the application of Service Engineering and Human Technology.

The Project Research Division is divided into four fields: “Healthcare and Sports,” “Medical and Material,” “Society and Arts,” and “Mobility.” Researchers from other departments and projects in Tsukuba University and other Research Institutions coordinate and collaborate with researchers from the Artificial Intelligence Infrastructure Research Division in application-oriented research projects.

The field of “Healthcare and Sports” promotes research in these fields using health and medical care data held by municipalities, developing projects for the use of AI in data analysis of regional medical care, comprehensive care, and services. Working in cooperation with Advanced Research Initiative for Human High Performance, this field also performs research on state-of-the-art sports measurement and data visualization technology and virtual reality.

In the “Medical and Materials” field, we are developing a system for automatic sleep stage determination using machine learning in collaboration with the International Institute for Integrated Sleep Medicine (WPI-IIS) and the Center for Computational Sciences. We are also developing

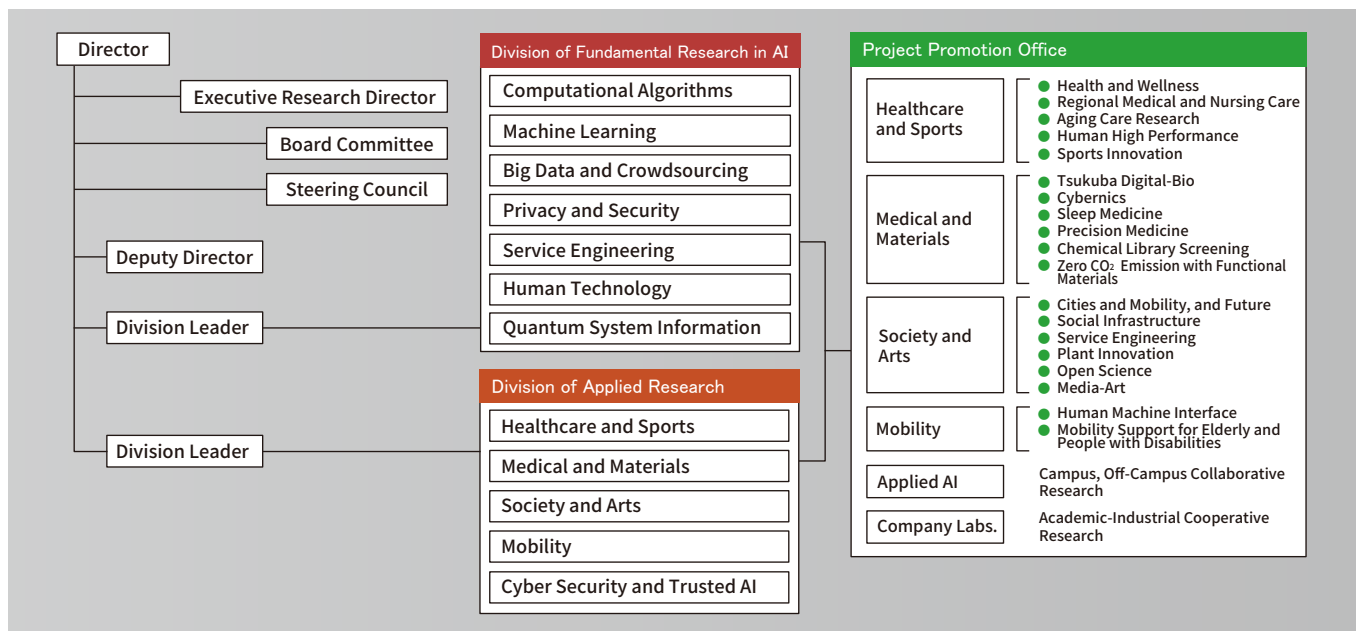
Digital-Bio research through integrating biological science and digital/AI technology with the Tsukuba Digital-Bio International Center, research on innovative Cybernic Systems in cooperation with the Center for Cybernics Research, and research on the next-generation sequencer, along with a functional prediction of candidate substances using chemical screening in collaboration with the Research and Development Center for Precision Medicine.

In the “Society and Arts” field, we collaborate with the R&D Center for Frontiers of MIRAI in Policy and Technology and municipal governments on the research of regional infrastructure and basic research on the social engineering of future societies. Also, we accelerate research and development on fundamental technologies for “Green Innovation” by leveraging AI technology with the R&D

Center for Zero CO₂ Emission with Functional Materials. Using data analysis and artistic approaches, we perform research work on design, service engineering, and the development of future agricultural industries.

In the “Mobility” field, we investigate technologies for developing self-driving cars and advanced driving support technology, based on driver and pedestrian movement analysis and risk assessment. This also includes applications of these technologies in various fields such as drone systems and the Naval fields.

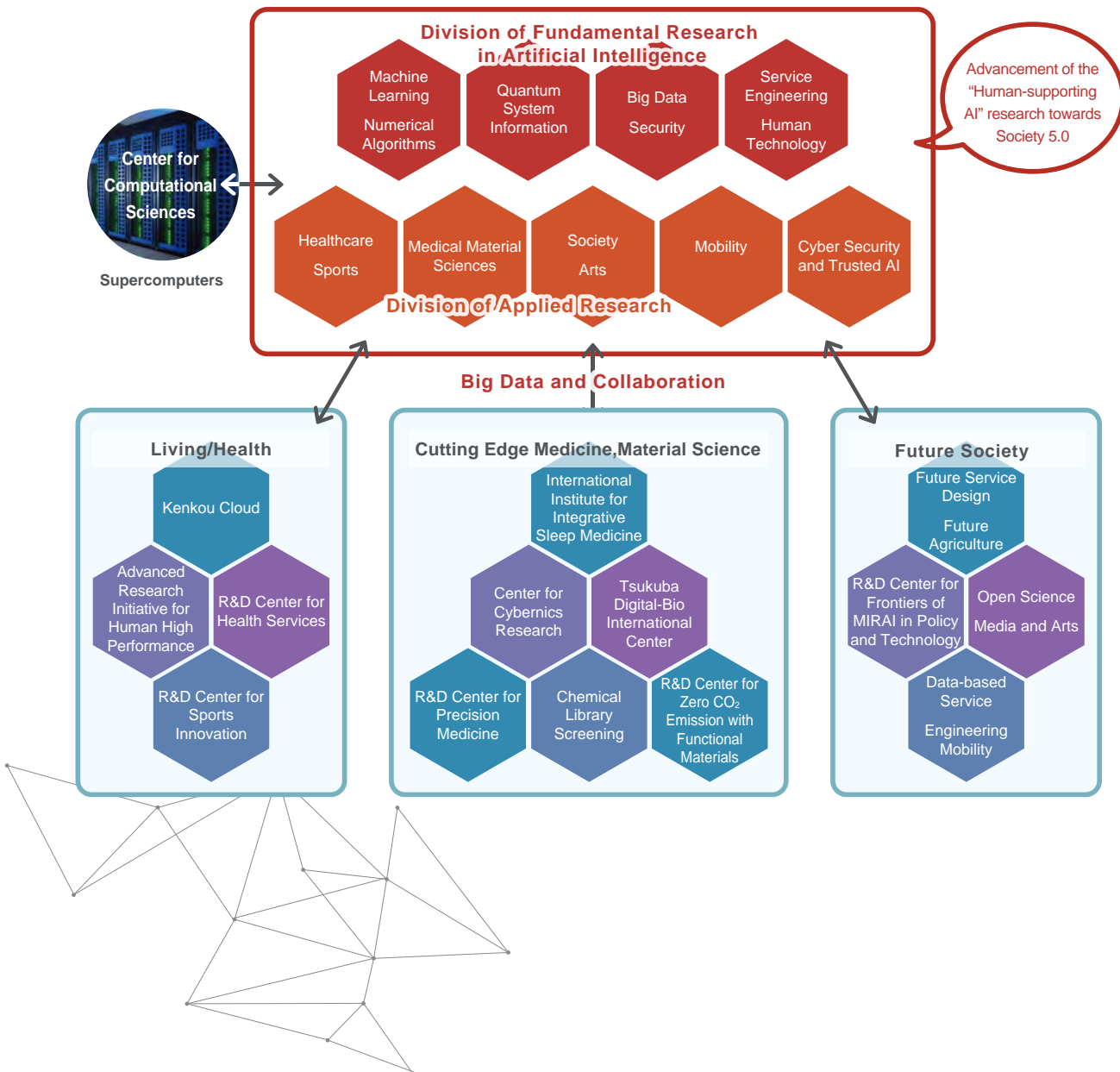
In the field of cybersecurity and trusted AI, we will work on research and applications in operating systems, distributed systems, cloud computing, software reliability, cryptography, game theory, etc.



Mission

The University of Tsukuba opened the Center for Artificial Intelligence Research (C-AIR) in April 2017 to promote advanced research and education on AI. This center supports and organizes the activities and collaborations between AI research groups from different fields in the University, promoting the interdisciplinarity that is key to the University of Tsukuba's research vision. In this sense, this center will work as a hub to mediate the cross-sectoral network of Research Centers and AI research projects within the University of Tsukuba. In particular, through collaboration with the Center for Cybernetics Research, the International Center for

Integrated Sleep Medical Science, the Center for Computational Science, the R&D Center for Frontiers of MIRAI in Policy and Technology, the Precision Medicine Development Research Center, the Tsukuba Digital-Bio International Center, and the R&D Center for Zero CO₂ Emission with Functional Materials, among others, we aim to explore new areas of research related to the theme "Human-supporting Artificial Intelligence." Our work draws a spiral of projects that begin at basic scientific research and reach to applied and industrial research, contributing to the creation of new values and the realization of the future super smart society.





Implementation of the “Super Smart Community” with Tsukuba Area as a model City

- Collaboration with Industry
- Collaboration with local National Research Institutes (NIMS, AIST, NIED, etc)
- Collaboration with TIA
- Collaboration with the AI center of AIST
- Collaboration with the Advanced Intelligence Project at RIKEN

Development of a base for Big Data utilization

Using the Interdisciplinary Character of our university, we will build a Big Data Utilization base through a network with each research center.

Development of AI technologies employing the power of Supercomputing

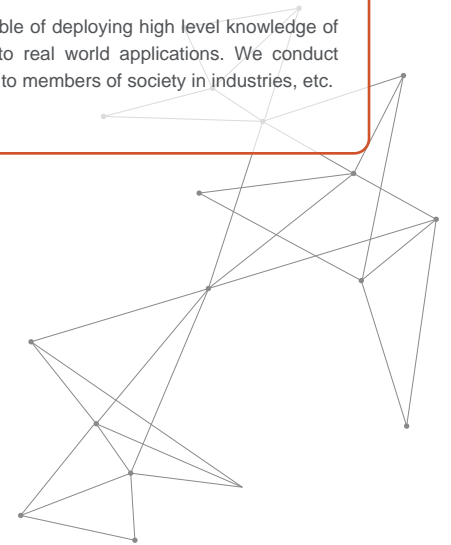
Through collaboration with our university's Center for Computational Sciences, we will develop large-scale data analysis tools for Artificial Intelligence.

Use of the Tsukuba Area as an Empirical Model City

Application of new technologies in Tsukuba as an Empirical Model City through the collaborative network with national research institutes and enterprises.

Development of New Human Resources for AI and Data Analysis

Develop new human resources capable of deploying high level knowledge of AI and data analysis technologies to real world applications. We conduct education through research activities to members of society in industries, etc.



Members / Laboratories

Division of Fundamental Research in Artificial Intelligence

Specialty on Numerical Algorithms

Tetsuya Sakurai

Executive Research Director of Center for Artificial Intelligence Research, Professor / Institute of Systems and Information Engineering



Area of Expertise

Computational Mathematics

Keywords Related to Research

High performance algorithms, Data analysis, Image analysis, Neural network computation

Shigeru Saito

Visiting Professor / SIGNATE Inc.



Area of Expertise

Wisdom of Crowds, System Life Science

Keywords Related to Research

Open innovation, Machine learning, OMICs data analysis

Yasuhiko Igarashi

Associate Professor / Institute of Systems and Information Engineering



Area of Expertise

Materials Informatics, Measurement Informatics

Keywords Related to Research

Machine Learning, Multivariate Analysis, Sparse Modeling, Data Driven Science

Akira Imakura

Associate Professor / Institute of Systems and Information Engineering



Area of Expertise

Numerical analysis

Keywords Related to Research

Matrix computations, Matrix factorization-based algorithms for deep neural network computation

Akira Terui

Associate Professor / Institute of Pure and Applied Sciences



Area of Expertise

Computer Algebra, Symbolic Computation

Keywords Related to Research

Computer algebra, Symbolic-numeric computation, Automated deduction

Yasunori Futamura

Associate Professor / Institute of Systems and Information Engineering



Area of Expertise

Parallel Numerical Algorithm

Keywords Related to Research

Dimensionality reduction, High performance parallel algorithm, Parallel solver for eigenvalue problems, Parallel numerical software

Xiucui Ye

Associate Professor / Institute of Systems and Information Engineering



Area of Expertise

Machine Learning

Keywords Related to Research

Feature selection, Data analysis, Clustering, Classification, Network computing

Tomoki Mihara

Assistant Professor / Institute of Pure and Applied Sciences



Area of Expertise

Number Theory

Keywords Related to Research

p-adic analysis, p-adic geometry, p-adic representation

Keiichi Morikuni

Assistant Professor / Institute of Systems and Information Engineering

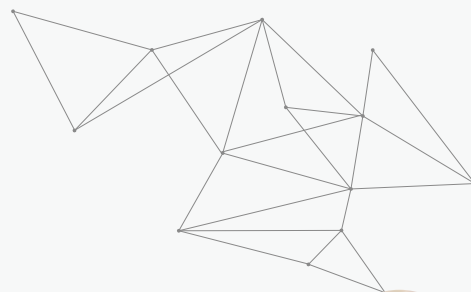


Area of Expertise

Numerical Linear Algebra

Keywords Related to Research

Least Squares Problem, Singular System, Preconditioning, Krylov Subspace Method, Eigenproblem



Specialty on Machine Learning

Kazuhiro Fukui

Director of Center for Artificial Intelligence Research, Professor /
Institute of Systems and Information Engineering



Area of Expertise

Pattern Recognition, Machine Learning, Computer Vision

Keywords Related to Research

Subspace methods, Mutual subspace method, Object recognition,
Face image analysis, Time series analysis, Motion analysis

Yoshihiro Kanamori

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Computer Graphics (CG), Computer Vision, Machine Learning

Keywords Related to Research

Rendering, Image Editing, Deep Learning

Taro Tezuka

Professor /
Institute of Systems and Information Engineering



Area of Expertise

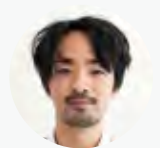
Machine Learning, Database

Keywords Related to Research

Kernel methods, Computational neuroscience

Takumi Kobayashi

Professor (Cooperative Graduate School Program) /
Institute of Systems and Information Engineering



Area of Expertise

Pattern Recognition, Machine Learning

Keywords Related to Research

Feature Extraction, Feature Representation Learning, Image Recognition,
Deep Learning, Sensor Data Analysis

Yutaka Satoh

Professor (Cooperative Graduate School Program) /
Institute of Systems and Information Engineering



Area of Expertise

Computer vision, Pattern recognition

Keywords Related to Research

Image recognition and understanding, Video recognition, 3D sensing and
recognition, Deep learning

Claus Aranha

Associate Professor /
Institute of Systems and Information Engineering



Area of Expertise

Theory and Application of Evolutionary Algorithms,
Modeling and Program Generation

Keywords Related to Research

Evolutionary algorithms, Swarm intelligence, Artificial life

Satoshi Iizuka

Associate Professor /
Institute of Systems and Information Engineering



Area of Expertise

Computer graphics, Computer vision, Machine learning

Keywords Related to Research

Image processing and generation, Image recognition, Deep learning

Yuki Endo

Associate Professor /
Institute of Systems and Information Engineering



Area of Expertise

Computer Graphics

Keywords Related to Research

Image Editing, Generative Model, Deep Learning

Ryotaro Sakamoto

Assistant Professor /
Institute of Pure and Applied Sciences

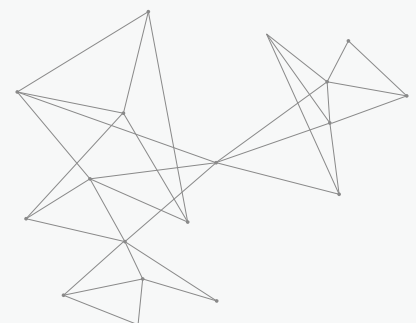


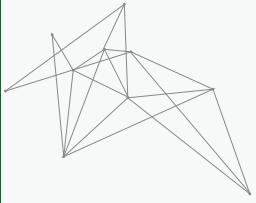
Area of Expertise

Number Theory

Keywords Related to Research

Iwasawa Theory, Selmer group, L-function





Specialty on Big Data / Crowdsourcing

Toshiyuki Amagasa

Professor / Center for Computational Sciences



Area of Expertise

Database, Data Engineering

Keywords Related to Research

Big data, Data mining, Semi-structured data

Atsuyuki Morishima

Professor /
Institute of Library, Information and Media Science



Area of Expertise

Database Systems

Keywords Related to Research

Crowdsourcing systems, Crowdsourcing applications,
Human computation, Query processing

Hiroaki Shiokawa

Associate Professor / Center for Computational Sciences



Area of Expertise

Data Engineering, Database System

Keywords Related to Research

Big data processing, Data mining, Graph data management

Hiroyoshi Ito

Assistant Professor /
Institute of Library, Information and Media Science



Area of Expertise

Data mining, Machine learning

Keywords Related to Research

Time-series data analysis, Social network mining, Human-AI collaboration

Kazumasa Horie

Assistant Professor / Center for Computational Sciences



Area of Expertise

Machine Learning, Biological Signal Processing

Keywords Related to Research

Neural networks, Deep Learning, Electroencephalogram, Electromyogram

Bou Savong

Assistant Professor / Center for Computational Sciences



Area of Expertise

Data Engineering, Database System

Keywords Related to Research

Big data processing, Data mining, Data stream processing • analytics

Specialty on Security / Privacy

Kazumasa Omote

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Information Security

Keywords Related to Research

Malware countermeasure, Cloud security, Risk assessment for cyber attacks

Youhei Akimoto

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Black-Box Optimization

Keywords Related to Research

Evolutionary Computation, Machine Learning, Markov Chain Analysis

Kazuto Fukuchi

Assistant Professor /
Institute of Systems and Information Engineering

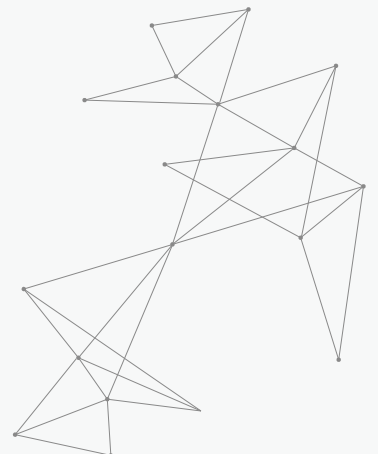


Area of Expertise

Mathematical statistics and machine learning

Keywords Related to Research

Statistical inference, Machine learning, Fairness, Privacy



Specialty on Service Engineering

Yukihiko Okada

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Japan's Service Development Theory

Keywords Related to Research

Service target costing, Data-driven service engineering, Applied statistics

Tuan Phung-Duc

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Applied Stochastic Process

Keywords Related to Research

Modelling and performance analysis of services and information systems, Stochastic models, Queueing theory

Akiko Yoshise

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Mathematical Optimization, Operations Research

Keywords Related to Research

Conic optimization, Algorithms, Optimization models

Yuichi Takano

Associate Professor /
Institute of Systems and Information Engineering



Area of Expertise

Operations Research

Keywords Related to Research

Mathematical Optimization, Financial Engineering, Machine Learning

Kyosuke Yamamoto

Associate Professor /
Institute of Systems and Information Engineering



Area of Expertise

Civil Engineering

Keywords Related to Research

Bridge Maintenance, Structure Design

Yuji Kawamata

Assistant Professor /
Institute of Systems and Information Engineering



Area of Expertise

Policy and Planning Sciences

Keywords Related to Research

Economics, Causal Inference, Computational Social Science, Federated Learning, Social Data Science

Specialty on Human Technology

Kenji Suzuki

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Artificial Intelligence and Robotics

Keywords Related to Research

Cybernetics, Medicine and healthcare, Assistive technologies

Fumihide Tanaka

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Artificial Intelligence, Agent Technologies

Keywords Related to Research

Social Robot, Human-Agent Interaction, Cyber-Physical Systems

Yasushi Nakauchi

Professor /
Institute of Systems and Information Engineering



Area of Expertise

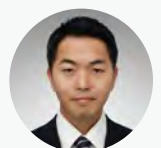
Intelligent Environments

Keywords Related to Research

IoT, Sensor network, Big data analysis

Hajime Nobuhara

Professor /
Institute of Systems and Information Engineering

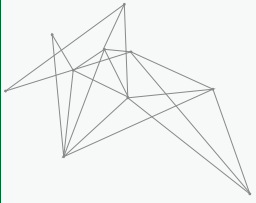


Area of Expertise

Computational Intelligence

Keywords Related to Research

Computational intelligence, Multi-media processing, Web intelligence, Drone



Specialty on Human Technology

Takeshi Shibuya

Associate Professor /
Institute of Systems and Information Engineering



Area of Expertise

Machine learning

Keywords Related to Research

Decision-making, Data analysis

Naoto Ienaga

Assistant Professor /
Institute of Systems and Information Engineering



Area of Expertise

Machine learning, Computer vision

Keywords Related to Research

Deep learning, Fisheries, Occupational therapy

Specialty on Quantum System Information

Noboru Kunihiro

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Cryptography, Quantum Computation

Keywords Related to Research

Cryptanalysis, Quantum Algorithm, Information Security

Yutaka Shikano

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Quantum Information Science, Theoretical Physics

Keywords Related to Research

Quantum Metrology, Quantum Measurement, Quantum Randomness, Fundamental Physics Search

Yasuhiro Takahashi

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Quantum Information Science, Quantum Computation Theory

Keywords Related to Research

Quantum Computer, Quantum Algorithm, Quantum Circuit

Yasuhiro Tokura

Professor / Institute of Pure and Applied Sciences



Area of Expertise

Condensed matter physics, Quantum Information

Keywords Related to Research

Semiconductor qubit, Quantum network, Non-equilibrium statistical physics

Satoya Imai

Assistant Professor /
Institute of Systems and Information Engineering



Area of Expertise

Quantum Information Theory

Keywords Related to Research

Entanglement, Quantum metrology

Masayuki Miyamoto

Assistant Professor /
Institute of Systems and Information Engineering



Area of Expertise

Theoretical Computer Science

Keywords Related to Research

Quantum computing, Distributed computing, Complexity theory



Division of Applied Research

Specialty on Healthcare and Sports

Shinya Kuno

Professor / Institute of Health and Sport Sciences



Area of Expertise

Sport Medicine, Health promotion, Health policy

Keywords Related to Research

Health promotion for the middle-aged and elderly, Health policy in community and workplace, Prevention of lifestyle-related diseases and nursing care, Prevention of sarcopenia and sarcopenic obesity

Nanako Tamiya

Professor / Institute of Medicine



Area of Expertise

Medicine, Medical and Health Services Research

Keywords Related to Research

Health services research, Research based on medical & long-term care claim data, Outcome research, Public health, Long-term care insurance system, The integrated community-care system, Evaluation of quality of medical treatment, Nursing and social welfare services

Li-Chen Fu

Visiting Professor / National Taiwan University



Area of Expertise

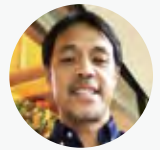
Smart Healthcare, Intelligent Robotics, AR/VR, Visual Application, Control

Keywords Related to Research

Socially Assisted Robots, Elderly Care, Visual Detection, AR for Metaverse, UAV

Tsuyoshi Matsumoto

Associate Professor /
Institute of Health and Sport Sciences



Area of Expertise

Sport Coaching

Keywords Related to Research

Sport, Coaching, Tactics, Strategy

Specialty on Medical and Material Sciences

Masahide Itoh

Professor /
Institute of Pure and Applied Sciences



Area of Expertise

Applied optics

Keywords Related to Research

Optical information processing, High-precision interferometric measurement, Optical wavefront measurement

Yoshiyuki Sankai

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Cybernetics, HOJO-brain, Artificial Intelligence; AI, Artificial brain, Cybernetic kernel

Keywords Related to Research

Cybernetics, Robotic treatment device, Bio robotics, Neuro-machine interface

Kazuya Morikawa

Professor / Institute of Medicine



Area of Expertise

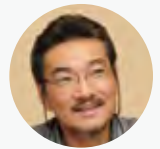
Bacteriology

Keywords Related to Research

Gram-positive pathogens, Staphylococcus

Masashi Yanagisawa

Professor /
International Institute for Integrative Sleep Medicine (WPI-IIS)



Area of Expertise

Sleep Biomedicine, Neuroscience, Pharmacology

Keywords Related to Research

Sleep / Wake, Electroencephalography, Polysomnography

Specialty on Medical and Material Sciences

Taka-Aki Sato

Senior Specially Appointed Professor /
R&D Center for Precision Medicine



Area of Expertise

Molecular Oncology

Keywords Related to Research

Oncogene, Tumor suppressor gene, Liquid biopsy, Metabolome analysis

Chii-Wann Lin

Visiting Professor / National Taiwan University



Area of Expertise

Bio-electronics, Optical Biosensor, Medical Devices

Keywords Related to Research

Neuromodulation, Plasmonics, Bio-signal Analysis

Larry Nagahara

Visiting Professor / Johns Hopkins University



Area of Expertise

Nanotechnology, Sensors, Scanning Probe Microscopy

Keywords Related to Research

Nanosensors, Nanobiotechnology, Internet of Things

Takaho Tsuchiya

Assistant Professor / Institute of Medicine

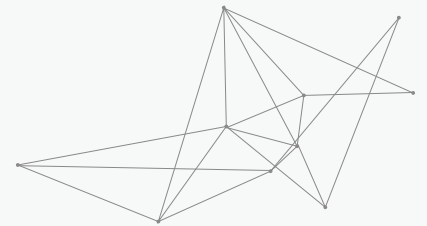


Area of Expertise

Systems Biology, Bioinformatics, Computational Biology

Keywords Related to Research

Single cell omics data analysis, Sparse modeling, System identification



Specialty on Society and Arts

Muneo Kaigo

Professor /
Institute of Humanities and Social Sciences



Area of Expertise

Humanistic social informatics

Keywords Related to Research

Digital democracy, Digital citizenship and participation, Network society

Takeshi Kimura

Professor /
Institute of Humanities and Social Sciences



Area of Expertise

History of Religion, American Studies

Keywords Related to Research

AI and Society, AI and Culture

Naoya Fukuda

Professor /
Institute of Life and Environmental Sciences



Area of Expertise

Protected Horticulture

Keywords Related to Research

Greenhouse management, Plant physiology, ICT for agriculture

Yutaka Hoshino

Professor /
Institute of Humanities and Social Sciences



Area of Expertise

Jurisprudenc

Keywords Related to Research

Civil Law, Financial Law, Troubles on School, Records on Litigation, Disclosure of Information and Personal Information, Plagiarism of Articles

Hitoshi Imaoka

Visiting Professor / NEC Corporation



Area of Expertise

Biometrics, Pattern Recognition

Keywords Related to Research

Face Recognition, Medical Image Processing, Machine Learning

Tanya Berger-Wolf

Visiting Professor /
Institute of Systems and Information Engineering



Area of Expertise

Artificial Intelligence, Applied Machine Learning, Computational Ecology

Keywords Related to Research

Imageomics, computational ecology, social network analysis, AI for conservation, AI for social good

Nii O. Attoh-Okine

Visiting Professor / University of Maryland, College Park



Area of Expertise

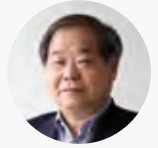
Artificial Intelligence, Cyber Resilience, Cyber Security in Critical Infrastructure, Graphical Probability Models and Railway Engineering

Keywords Related to Research

Graphical Probability Models, Railway Track Engineering, Blockchain Technology, Bayesian Networks, Neural Networks

Kou Miyake

Visiting Professor / NTT Data Intellink Corp.



Area of Expertise

Cybersecurity, IT System Architecture

Keywords Related to Research

Cybersecurity Architecture and related leading-edge technology, Risk Management, Security Management, National Security

Toshiaki Uchiyama

Associate Professor / Institute of Art and Design



Area of Expertise

Design Science

Keywords Related to Research

Interaction Design, Product Design

Yoichi Ochiai

Associate Professor /
Institute of Library, Information and Media Science



Area of Expertise

CGH, HCI, VR, Visual Auditory Tactile Display, Digital Fabrication

Keywords Related to Research

CGH, HCI, VR

Hiroko Terasawa

Associate Professor /
Institute of Library, Information and Media Science



Area of Expertise

Acoustics, Computer Music, and Sound Design

Keywords Related to Research

Sound synthesis, Data sonification, Sonic interaction, Musical emotion, and Timbre perception

Wataru Miyasaka

Associate Professor /
Institute of Humanities and Social Sciences

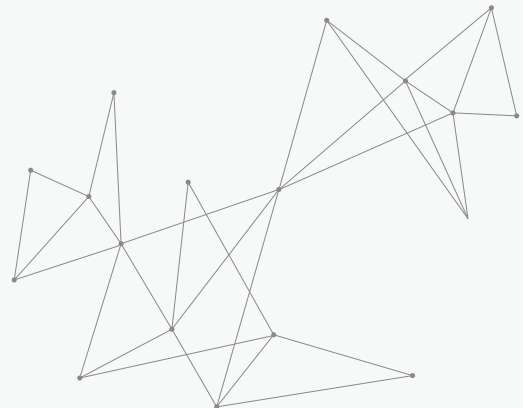


Area of Expertise

Legal History

Keywords Related to Research

Roman Law, Civil Law, Comparative Law



Specialty on Society and Arts

Ken Chiba

lecturer / Institute of Humanities and Social Sciences



Area of Expertise

Ethics

Keywords Related to Research

History of Ideas, Prejudice, Responsibility, Autonomy

Hajime Akiyama

Assistant Professor /
Institute of Humanities and Social Sciences



Area of Expertise

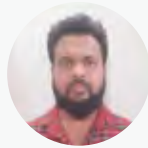
Peace Studies, Constitutional Law, International Law, International Organisations

Keywords Related to Research

Nationality and Statelessness, Post-COVID-19 Studies, Post-Anthropocene, Science and Technology and Law

Dipanjoyoti Paul

Visiting Collaborative Researcher /
Indian Institute of Engineering Science and Technology, Shibpur

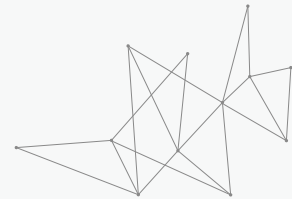


Area of Expertise

Machine Learning, Pattern Recognition, Computer Vision

Keywords Related to Research

Explainable AI, Computer Vision, AI in Health, Streaming Data, Information Retrieval, Natural Language Processing



Specialty on Mobility

Makoto Itoh

Professor /
Institute of Systems and Information Engineering



Area of Expertise

Human Factors

Keywords Related to Research

Human-Machine Systems, Automation, Automated Driving

Yoshinari Kameda

Professor / Center for Computational Sciences



Area of Expertise

Computational Media

Keywords Related to Research

Computer vision, Mixed reality, Virtual reality, Augmented reality

Yuichi Saito

Assistant Professor /
Institute of Systems and Information Engineering

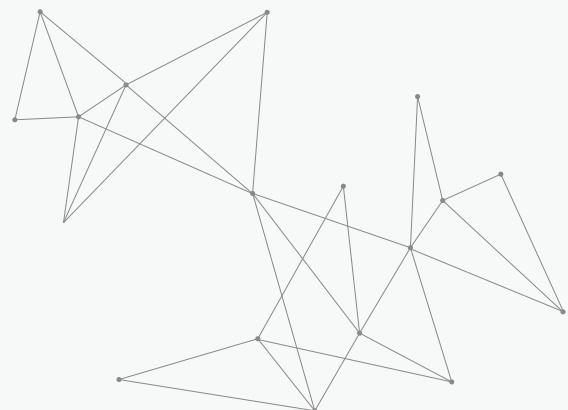


Area of Expertise

Human-machine systems, Cognitive engineering, Human interaction

Keywords Related to Research

Automated driving, Driver assistance, Shared control, Analysis of drive recorder data



Specialty on Cyber Security and Trusted AI

Kazuhiko Kato

Professor /
Institute of Systems and Information Engineering



Area of Expertise

System software

Keywords Related to Research

Operating systems, Distributed systems, Cloud computing, Software security

Daiyuu Nobori

Visiting Professor / Headquarters for International
Industry-University Collaboration University of Tsukuba



Area of Expertise

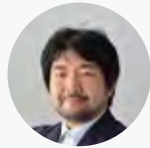
System software and Internet

Keywords Related to Research

OS, Network, Security, Human resource development with trial-and-error environment

Hirotake Abe

Associate Professor /
Institute of Systems and Information Engineering



Area of Expertise

System Software

Keywords Related to Research

Distributed Systems, Computer Network, Computer Security

Takashi Nishide

Associate Professor /
Institute of Systems and Information Engineering



Area of Expertise

Cryptography

Keywords Related to Research

Public Key Cryptography, Cryptographic Protocol, Multiparty Computation

Koji Hasebe

Associate Professor /
Institute of Systems and Information Engineering



Area of Expertise

Multi-agent systems

Keywords Related to Research

Mathematical logic, Formal methods, Autonomous distributed systems, Information security, Game theory

Fumio Machida

Associate Professor /
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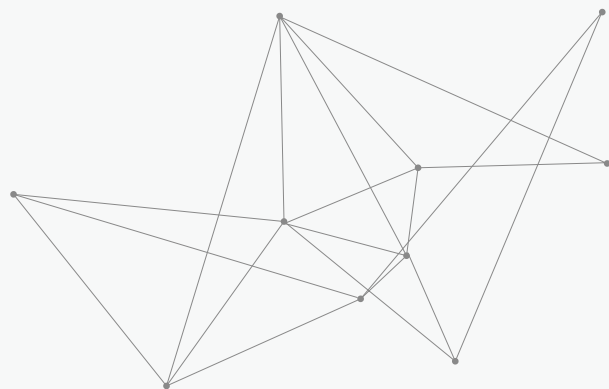


Area of Expertise

System dependability

Keywords Related to Research

Software reliability, Dependability evaluation, Stochastic models, System design optimization





▲ Map of the Tsukuba Station Area



▲ Tsukuba University Campus Detailed Map

■ **By train**

Get off at the Tsukuba Station of the Tsukuba Express Line
 Go to the Tsukuba Center, Bus Stop #6
 Take the "Tsukuba Daigaku Junkan Hidarimawari / Migimawari" bus,
 get off at the TARA Center Bus stop
 The bus takes approximately 15 minutes

■ **By car**

Approximately 15 minutes from "Tsukuba Central IC" in the metropolitan Chuo Liaison Expressway



Website
<https://air.tsukuba.ac.jp/en/>



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