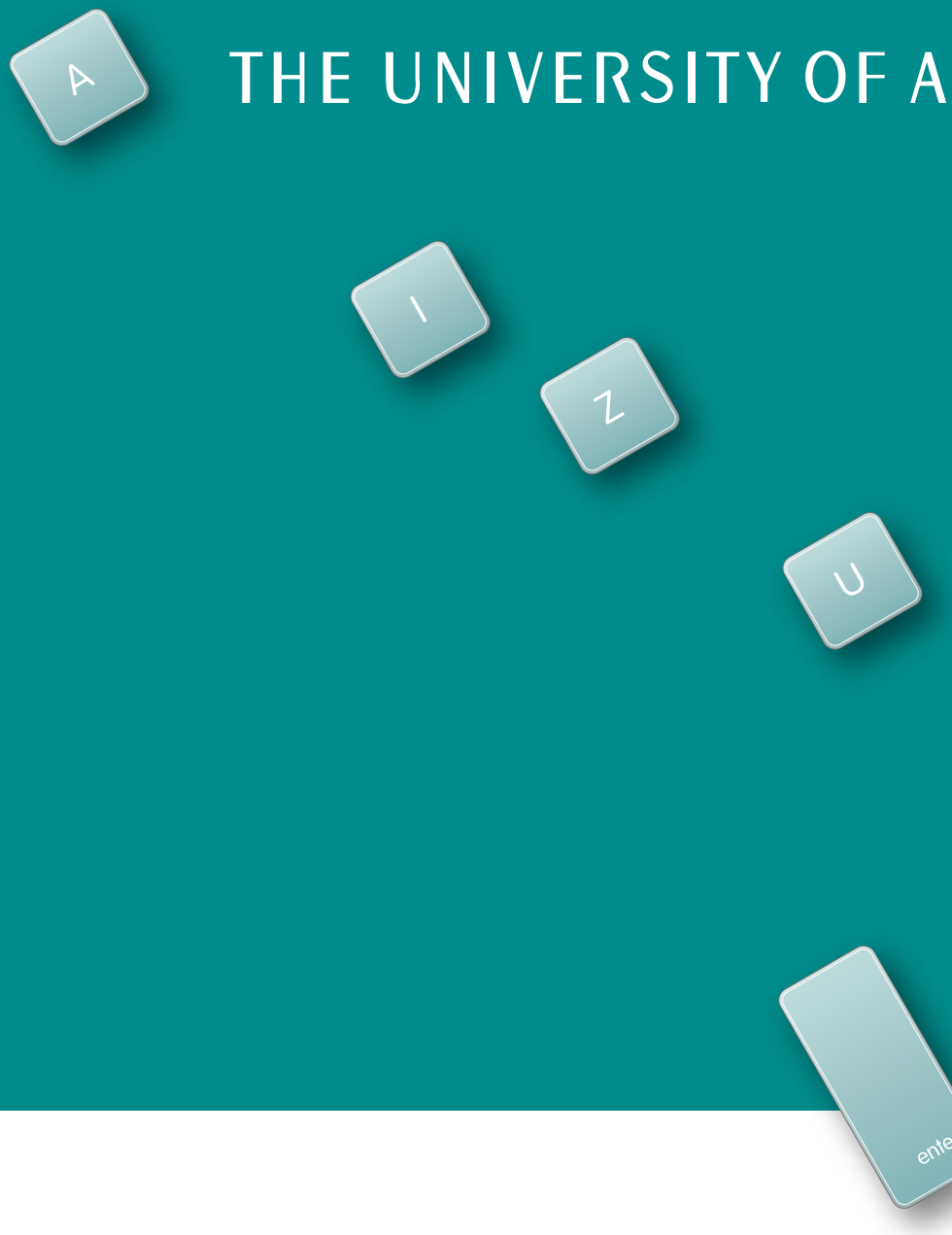
The School of Computer Science and Engineering

AIZU

THE UNIVERSITY OF AIZU



2015

Learning Shapes the Future at the University of Aizu.

The University of Aizu was established in 1993 as the first university in Japan solely dedicated to computer science and engineering. “Computer science and engineering” is a cutting-edge research area with a broad range of applications and possibilities. It is one of the core areas leading to intellectual production technology. The University of Aizu is seeking individuals who think globally based in Aizu and take on new challenges in the field of computer science and engineering.

The President and Chairperson of the Board of Executives,
The Public University Corporation, The University of Aizu

Ryuichi Oka, Ph.D.

Greeting from President Oka

Choosing which undergraduate department of a university to enter is a very big decision for high school students. When it comes to deciding on your future, can you really afford to base your decision on current trends and information from your parents and teachers alone? Sometimes even the fields you feel you are suited for might not be what you imagined.

Therefore, looking at the changes in technology and society in the last two decades, I believe that now is a good time to rethink what is truly important when it comes to designing your own future.

Through its superior promise and productivity, the field of information technology has rapidly grown into the largest foundational industry in Japan over the past 20 years. The information technologies that form this foundation are not limited simply to programming, but are the foundations of science, technology, and industry through intellectual production. Further, while information technologies are often seen as being purely scientific, it is actually a constantly-expanding field that has strong connections to the design industry and to psychology.

Being a university specialized in information technologies, the University of Aizu provides a high-level IT education. Our university is also proud of its highly international faculty, with 40% of faculty members being foreign nationals; the highest percentage among science programs at domestic universities. Because of this, our university has a highly international flavor, and consistently produces graduates capable of succeeding around the world.

The University of Aizu is waiting for high school students such as yourselves who can pursue both their dreams and goals in the real world over the long term.

CONTENTS

Our Cutting-edge “Computer Environment” and Content-rich “English Education” Optimize Learning

Computer Environment

24-hour Access to State-of-the-art Computers

Almost 3,000 Internet-enabled computers are installed on campus.

Machines and equipment used at Computer Exercise Rooms and Hardware Workshops are replaced every three years. This outstanding environment gives birth to creative computer scientists and engineers.

About UNIX

We have adopted a UNIX-based system for our core computer environment to ensure visibility of information concerning internal operations and high overall performance, including network flow, and to realize a stable education and learning environment.

English Language Education

We place great importance on English language skills and nurture a robust sense of internationality.

As the field of computer science and engineering is firmly rooted in English language, improvement of proficiency in English is a critical issue for students. Therefore, language education at the University of Aizu solely focuses on English. The fact that all of our students are required to write a graduation thesis in English has received worldwide attention from information-related companies.

English Education through Leading-edge Technologies

State-of-the-art English education based on scientific research on L1/L2 acquisition of phonology and phonetics.

Ian Wilson
Professor
From Canada

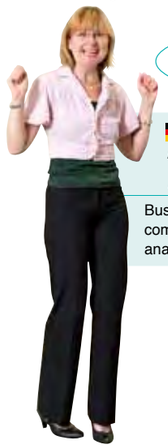
My main research interests are speech production and L2 acquisition of pronunciation. I use ultrasound as a tool to view and measure the tongue during speech. My research in the CLR Phonetics Laboratory revolves around the production of speech, such as “what sounds are easier/more difficult to acquire by L1 and L2 learners, and why?” In addition, I am interested in the Aizu dialects of the Japanese language, and I am creating an audio database to preserve samples for future generations.

Phonetics using ultrasound has also been my expertise. I was an instructor on an NHK English conversation program.

Cultivation of Global Visions

Top-level Faculty Recruited from All Over the World

The situation in Japan today is such that both the quality and quantity of computer researchers and engineers are insufficient, and there are only a limited number of people capable of supervising them. In order to cope with the situation and to put into practice the University's founding principles, the University seeks outstanding faculty worldwide by strict screening on their achievements in their specialized fields, and this has resulted in approximately 40% of the faculty being non-Japanese. Not only does this prove that computer science and engineering is viable globally, but also it illustrates the high level of our University. Our outstanding faculty also include Japanese educators and researchers, and both Japanese and non-Japanese researchers on campus collaborate on joint projects to make global research practically viable.



Learn IT and English, and enjoy life at UoA!

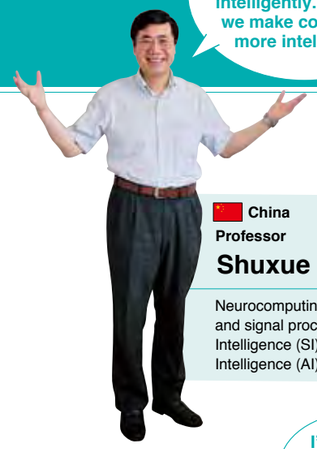
Germany
Associate Professor
Anna D.B.
Business/workplace communication and dialogue analysis

Let us collaborate to advance power-saving technologies!

Russia
Senior Associate Professor
Irina Khmyrova
Theoretical study of semiconductor nanostructure electronic and optoelectronic devices

At universities, self-initiated learning is important.

Bulgaria
Senior Associate Professor
Konstantin Markov
Speech recognition



Computers can compute faster than human beings, but not intelligently. How can we make computers more intelligent?

China
Professor
Shuxue Ding
Neurocomputing, information and signal processing, Swarm Intelligence (SI), Artificial Intelligence (AI)

I'm looking forward to seeing you at UoA!!

Japan
Professor
Toshiaki Miyazaki
Computer architecture

Let me help to realize your goal.

Canada
Professor
John Brine
Cultural and collaborative aspects of learning

Thinking on your own. It is valuable.

U.S.A.
Professor
Michael Cohen
Computer arts

Russia 6

Germany 2

France 1

Bulgaria 1

Tunisia 1

Egypt 1

China 11

Korea 3

India 3

Taiwan 1

Vietnam 2

Australia 1

Japan 65

Canada 4

U.S.A. 3

Colombia 1

New Zealand 1

Enjoy both learning state-of-the-art computer science and engineering and Aizu's scenic beauty and culture!

Egypt
Senior Associate Professor
Mohamed Hamada
Artificial Intelligence and its application to acquisition of learning skills

Come to Aizu to make your own computer!

Tunisia
Senior Associate Professor
Abderazek Ben
Embedded systems, computer architecture

Think! First. Create new ideas! Next.

India
Professor
Sabhash Bhalla
Database systems, cloud computing

Do your best in learning and enjoying life!

Vietnam
Senior Associate Professor
Anh Tuan Pham
Optical wireless communication networks

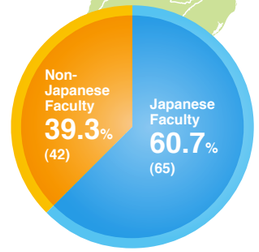
Let us study English together. I also recommend studying abroad.

Korea
Associate Professor
Younghyon Heo
Speech perception

If you want to do something, you can do it. We support you at full stretch.

Colombia
Associate Professor
Julian Villegas
Computer arts

Faculty Composition



UoA International Relations
～Get hands-on global experiences in Aizu!～

As a result of the internationalization promoted at the University of Aizu since its establishment, agreements have been formed with over 60 universities and research institutes all over the world. The University of Aizu has also promoted collaborative research with universities overseas, and hosted international scientific conferences on campus every year.

Internationalization has steadily progressed at the University by accepting excellent international students and exchanging faculty and students through the distinctive international channels developed over the years.

Academic Exchange Partnership with Universities Abroad: 63 universities in 18 countries

Korea
- Pusan National University
- Korea University
- Kongju National University
- Hallym University
- University of Seoul
- Chungbuk National University
- Biometrics Engineering Research Center, Yonsei University
- Pohang University of Science and Technology
- APEC Climate Center

Taiwan
- Chaoyang University of Technology
- National Chi Nan University
- Taiwan National Central University
- Tamkang University

Vietnam
- FPT University
- Vietnam National University, Hanoi, the University of Engineering and Technology
- Vietnam National University, Hanoi University of Languages and International Studies
- Posts and Telecommunications Institute of Technology
- Hanoi University of Technology
- Vietnam National University, Ho Chi Minh City, International University

Russia
- St. Petersburg Electrotechnical University
- St. Petersburg University of Information Technology, Mechanics and Optics
- Saint Petersburg State University
- St. Petersburg State Polytechnical University
- Moscow Institute of Physics and Technology
- Moscow Institute of Radioengineering, Electronics and Automation
- Novosibirsk State University
- Novosibirsk State Technical University
- Moscow State Pedagogical University

Poland
- Polish Japanese Institute of Information Technology
- Gdansk University of Technology

China
- Shanghai University
- Shanghai Jiao Tong University
- Joint Center for Nuclear Physics, Peking University
- Huazhong University, University of Science and Technology
- Fudan University
- Institute of Modern Physics, Chinese Academy of Science
- Nanjing University
- School of Software & School of Computer Science and Technology of Harbin Institute of Technology
- School of Software and Microelectronics, Peking University
- Dalian Neusoft Institute of Information
- Central South University
- Shandong Academy of Sciences
- Jinan University

India
- Indian Institute of Technology Delhi
- University of Delhi

New Zealand
- The University of Waikato

U.S.A.
- Rose-Hulman Institute of Technology
- University of South Carolina
- University of West Virginia
- Mercer University
- Taylor University

Romania
- Politech University of Timisoara

Germany
- Fachhochschule Dusseldorf, University of Applied Science
- Technical University of Munich
- Max Planck Institute of Molecular Cell Biology and Genetics

France
- Ecole des Mines de Nancy
- The National Institute for Applied Sciences (INSA) Rennes

Portugal
- University of Porto

Italy
- Sapienza University of Rome

Sweden
- Umeo University

Finland
- University of Eastern Finland

Nigeria
- African University of Science and Technology

Estonia
- Tallinn University of Technology

49 international students from around the world

(As of May 1, 2014)

UoA

Russia, U.S.A., China, Bulgaria, Taiwan, El Salvador, Germany, Tunisia, Kyrgyzstan, Sri Lanka, Laos, Vietnam, Senegal, France

International Exchange Activities

Growing Internationalization at the University of Aizu

The Center for Strategy of International Programs (CSIP)

CSIP will continue to support individuals who have aspirations to work globally, so that they will be able to make the most of significant opportunities.

Numerous events for international understanding and exchange are organized by the Center for Strategy of International Programs. Also, the on-campus International Lounge has been renovated to better enable students to search for information on studying overseas and enjoy international exchange in an international environment.

Japanese Culture Experience Program

International Symposium

Study Abroad Fair

Academic Credit Transfer

Overseas Training

Subsidized short-term study abroad programs are available for students who demonstrate a sincere interest and motivation to study and conduct research abroad. Taking advantage of our academic credit transfer system, students can study, on a semester basis, at academic exchange partner universities overseas and earn credits from courses taken there.

Universities at which our students have studied and conducted research

- Rose-Hulman Institute of Technology, U.S.A. (The academic credit transfer system has been used.)
- West Virginia University, U.S.A.
- South Carolina University, U.S.A.
- University of Dublin, Ireland
- University of Rome La Sapienza, Italy
- Nanyang Technological University, Singapore
- University of Porto, Portugal
- Shanghai Jiao Tong University, China
- Mercer University, U.S.A.
- The University of Waikato, New Zealand
- Dalian Neusoft University of Information, China

Hosting of and Participation in Competitions

As an institution dedicated solely to computer science and education, the University of Aizu hosts "PC Koshien", a personal computer contest for high school and technical college students nationwide. UoA students also actively embrace the challenge of participating in external contests and competitions to test the expertise and skills they have acquired in our outstanding learning environment in the world arena.

Personal Computer Contest for Senior High School Students in Japan, "PC Koshien"

Outline

Since AY 2003, Fukushima Prefecture and the University have jointly hosted personal computer contests for students from high schools and technical colleges nationwide. Through hosting of the contest, the University aims to broaden the base of human resources to support information-oriented society. The final round for the twelfth year of the contest has been scheduled for Saturday, November 8 and Sunday, November 9, 2014 at the University of Aizu.

A total of 14,500 students have participated in the contest in the past. A large number of those students were admitted to the University of Aizu. From among them, some students also participated and showed great achievements in the world finals of ACM, International Collegiate Programming Contest. In addition, information-technology oriented companies, including local companies have had high expectations for this contest, many of which offered co-sponsorship.

Development of an Online Rating System for Programming Questions, "Aizu Online Judge (AOJ)"

Associate Professor Yutaka Watanobe, the developer of AOJ

Aizu Online Judge (AOJ) was created in 2004 as an online system for challenging tasks from previous programming competitions and rating resulting programs. Tasks are sourced from various competitions including the International Olympiad in Informatics for high school students, PC Koshien and the ACM International Collegiate Programming Contest (ACM-ICPC) enabling users to practice programming skills at an appropriate level. As a result, AOJ has been helping improve programming skills among both junior and senior high school students and university students. AOJ's time and score-based ranking system also stimulates users' motivation to improve their skills, and approximately 16,000 users have registered with AOJ worldwide since it was opened to the public in 2009.

Aizu Online Judge (AOJ) http://judge.u-aizu.ac.jp/onlinejudge

Participation in ACM international Collegiate Programming Contest (ICPC)

Organized by the Association for Computing Machinery, the ACM International Collegiate Programming Contest (ACM-ICPC) pits the intellectual prowess of prestigious universities worldwide in the field of computing. In ACM-ICPC 2008, a UoA team of students who had practiced hard through AOJ proceeded to the World Finals. To date, only eight Japanese universities, including Kyoto University, Waseda University, the University of Tokyo, Tokyo Institute of Technology, Saitama University, the University of Electro-Communications, University of Tsukuba and the University of Aizu, have qualified for world finals. Teams from the University of Aizu have attained good results in the preliminary rounds for many years. Our target for 2014 is to win the regional contest for Asia and advance to the World Finals.

In the past, the University of Aizu has hosted the Asian Regional Contest three times (2003, 2008 and 2013).

AY 2008

Preliminary Rounds → Success → Asia Regional Contest → Success → World Finals

Result: 49th place from within 100 teams

100 teams
||
100 qualifying teams from within 7,109 teams from 1,838 universities in 88 countries

AY 2013 Results of the Preliminary Rounds

Rank	Institution
1	The University of Tokyo
2	The University of Tokyo
3	The University of Tokyo
4	Tokyo Institute of Technology
5	Kyoto University
6	The University of Tokyo
7	The University of Tokyo
8	The University of Tokyo
9	Kyoto University
10	Osaka Prefecture University Collage of Technology
11	Kyushu University
12	The University of Tokyo
13	Tokyo Institute of Technology
14	**The University of Aizu**
15	Nagoya University

AY 2013 Results of the Asian Regional Contest

Rank	Institution
1	The University of Tokyo
2	National Taiwan University
3	The University of Tokyo
4	Shanghai Jiao Tong University
5	Tsinghua University
6	Tokyo Institute of Technology
7	The University of Tokyo
8	Tokyo Institute of Technology
9	The University of Tokyo
10	Kyoto University
11	Kyoto University
12	University of Tsukuba
13	**The University of Aizu**
14	**The University of Aizu**
15	Osaka University

At ISAC Tokyo, a UoA team of students from ARC-Space won the referees' special award for their application, "Lunar Travel Agency".

A team of students, most of whom belong to CAIST/ARC-Space, won the referees' special award, the "ASTRAX Award" at the International Space Apps Challenge (ISAC) Tokyo, for their application "Lunar Travel Agency".

ISAC is a space hackathon event that started in 2012 for the development of software applications. In 2013, over 8,200 participants worked on application development at 83 locations in 44 countries, resulting in the world's largest hackathon event. Our student team developed a software application named "Lunar Travel Agency" that shows users itinerary samples and sightseeing information for travel to the Moon. The application attracted lots of attention in that it provides real information of the Moon, enabling users to have an image of lunar travel, and was awarded the "ASTRAX Award". This result is very impressive considering that our team mainly consisted of students, whereas most of the teams were led by working adults.

Advancing Together with the Region

University Open to Local Communities

Since its establishment in 1993, the University of Aizu has actively engaged in activities that contribute to the local community under one of its founding goals, "Contribution to industries / culture in Fukushima Prefecture". We proactively collaborate with local industries to create new industries centered around our research and technology in partnership with local companies.

University-Business Innovation Center (UBIC)

"The University-Business Innovation Center (UBIC)" was established on campus as a gateway and a hub for university-industry collaboration. UBIC creates innovative ideas and engages in collaborations with the local community as a means of sharing the UoA's research and educational achievements with industry and the region.

Since AY 2007, UBIC has hosted the "Aizu IT Aki Forum", which attracts people in the ICT industry, researchers and university students and disseminated cutting-edge ICT information from Aizu to all over the world.

Under the slogan "Unlimited potential of IT for the next 20 years", AY 2013 forum introduced how ICT could contribute to making a difference in our lives.

University-Business Innovation Center (UBIC)

Aizu IT Aki Forum 2013

The University of Aizu Revitalization Center (ARC)

In March 2013, the University of Aizu inaugurated the "University of Aizu Revitalization Center (ARC)" with the aim to support steady reconstruction and rejuvenation of Fukushima from the Great East Japan Earthquake and nuclear disasters by making use of the University's strengths as a university specializing in ICT.

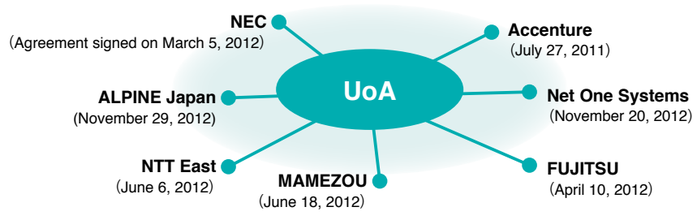
Construction of its core facility, the "Laboratory for Leading-edge ICT in Aizu" started in May 2014, and operation and provision of services are expected to start in AY 2015. In parallel with the construction of the Laboratory, we will proactively work on projects in collaboration with ICT companies, University-initiated venture companies, etc. for industrial promotion and job creation which are pillars of Fukushima Prefecture's reconstruction and revitalization. We are aiming to establish a "global ICT base" in Aizu, with the Revitalization Center playing a leading role.

Laboratory for Leading-edge ICT in Aizu (image)

Major Activities

- Management of prefectural citizens' health survey data and promotion of advanced ICT research projects for smart grid and renewable energy
- Provision of spaces for creation of new industry including a testing center and security room, aiming to nurture innovations and venture businesses
- Promotion of advanced ICT research and ICT human resource development programs

Collaboration Partner Companies (as of June 1, 2014)



This curriculum is based on CC2005 (Computing Curricula 2005), a leading educational curriculum in computer science and engineering developed through discussions by IEEE*1 and ACM*2.
[Notes] *1 IEEE: The Institute of Electrical and Electronics Engineers, Inc. *2 ACM: Association for Computing Machinery

High-quality Curriculums for Realization of Chosen Career Paths

▶ 5 Fields and 9 Tracks for realization of student's future paths

The curriculum of the Undergraduate School is comprised of 5 Fields (specialized fields) and 9 Tracks (models for course planning).

Studies in each Field will satisfy students' diversified intellectual curiosity: "What are fundamental principals of computers?" "I want to design computers." "What comprises the Internet?" "I am interested in robotics and medical science." "I hope to develop a massive computing system."

Under this curriculum, students can take courses in relevant specialized fields according to their plans for their futures.

However, not everything should be decided at one time. The curriculum has a flexibility which allows students to change courses, fields and / or tracks through advice from their curriculum advisors and graduation research supervisors. The University of Aizu values such flexibility as a very important factor in naturally maximizing students' abilities.

▶ Diverse systems for nurturing abilities

Our University is active in development of approaches to help students acquire well-grounded abilities, which will be helpful when they go out in the world.


Course Planning System

■ Curriculum Advisors
Throughout students' enrollment at the University, from admission to graduation, and upon making course plans, students will be fully supported by curriculum advisors.

■ Upon graduation, students will be awarded certificates for completion of relevant fields and tracks.
Students, when they pass certain track-recommended courses and earn a specific number of academic credits, shall be provided with a certificate of merit for successfully completing relevant tracks. Authorization for completion of multiple tracks is also possible.

■ Adoption of a GPA System
In order to increase students' motivation to study, the University adopts a GPA* System, an internationally recognized system for evaluation of students' academic performance. *GPA: Grade Point Average

■ Course Planning System
At university, it is the students who decide what courses to attend. Our Course Planning System enables students to check, whenever the need arises, which courses they have taken and which courses they should take in order to realize their chosen career paths.

Curriculum

Undergraduate School

Examples of Future Paths	Field	Specialized Fundamental Courses, General Education Courses, English Language Courses	Specialized Courses (Regular Courses to deepen specialized knowledge and skills)	Other Courses	The Teaching Programs	Graduation Theses (GT)
●Financial engineering analysts ●IT consultants, etc.	Field: **Computer Science** TRACK: Computer Science Fundamentals / Computational Modeling	**Specialized Fundamental Courses** Basic studies on computers ■Mathematics and Related Courses ■Natural Sciences and Related Courses ■Computer Fundamentals and Related Courses ■Programming and Related Courses ■Fundamentals of Computer Science & Engineering and Related Courses **General Education Courses** For enriched humanness, sound mind and body ■Humanities and Social Sciences ■Physical Activities **English Language Courses** Practical English education for computer science and engineering learners	■Applications ■Software Engineering	**Venture Start-up Factories** Simulated experience of starting up business ventures **Student Cooperative Class Projects (SCCPs)** Freshmen to seniors study and research together. **Career Design** Planning of future paths	**The Teaching Programs** For students aiming to obtain the teaching certificate	**Graduation Theses (GT)** A compilation of students' learning for 4 years in English
●Development of computer systems ●Development of home electrical appliances and vehicle-mounted devices, etc.	Field: **Computer Systems** TRACK: Computer System Design / VLSI (Very-Large-Scale Integrated Circuit) Design		■Computer Systems ■Computer Network Systems			
●Network engineers ●Communication-oriented businesses, etc.	Field: **Computer Network Systems** TRACK: Computer Network Systems		■Computer Network Systems ■Applications ■Software Engineering			
●Robotics ●Medical businesses ●Game development, etc.	Field: **Applied Information Technologies** TRACK: Virtual Reality & Human Interface / Robotics & Control / Biomedical Information Technology		■Computer Network Systems ■Applications			
●Development of large-scale computer systems ●Project managers ●System administrators, etc.	Field: **Software Engineering** TRACK: Software Engineering		■Software Engineering			

Graduate School

Courses	Thesis Research / Arena
Regular Courses Specialized knowledge and skill development **Seminars** Broad-spectrum learning	**Software Development Arena** Improvement of problem-solving skills **Research for Master's theses**

Education

For Acquisition of Basic Skills and Expertise

Specialized Fundamental Courses

Specialized Fundamental Courses are categorized into five groups; “Mathematics”, “Natural Sciences”, “Computer Literacy”, “Programming”, and “Fundamentals of Computer Science and Engineering”. Students learn basics regarding computer-related fields by taking these courses, before going on to advanced courses.

Introductory Programming

Associate Professor Kohei Kitazato

Introductory Programming is one of the first courses you will take as a new UoA student. While most new students can use computers, the majority only have experience surfing the Internet, creating documents, and using ready-made applications. By learning programming, you will gain the ability to make a computer operate exactly as you command it for the first time. Additionally, programming is one of the basic skills required at the University of Aizu, and is necessary for many classes here.

In this class, you start from the basics, learning the most popular programming language, C. Think of C as a lingua franca like English for computers. This course is aimed at helping you learn how fun programming can be, and includes special lectures around the middle of the semester by UoA alumni on the fun of programming from the viewpoint of working adults.

CATEGORY

Mathematics and Related Courses
- Linear Algebra I･II
- Calculus I･II
- Fourier Analysis
- Complex Analysis
- Probability and Statistic
- Applied Algebra
- Mathematical Logic
- Introduction to Topology
- Applied Geo. and Top.
- Computational Geometry

Natural Sciences and Related Courses
- Dynamics
- Electromagnetism
- Quantum Mechanics
- Semiconductor Devices
- Thermodyn. and Stat. Mech
- Introduction to Optoelectronics

Computer Fundamentals and Related Courses
- Literacy I･II
- Intro. Comp. S&E
- Intro. Computer Systems
- CSE Laboratories
- Information Security
- Information & Industry
- Information Ethics
- Introduction to IT Engineering
- Intro. Multimedia Systems

Programming and Related Courses
- Intro. Programming
- C Programming
- JAVA Programming I･II
- C++ Programming
- Computer Languages

Fundamentals of Computer Science & Engineering and Related Courses
- Algo. and Data Struct.
- Information Theory
- Discrete Systems
- Logic Circuit Design
- Computer Architecture
- Operating Systems
- Database Systems
- Automata and Languages
- Advanced Algorithms
- Language Processing Systems
- Numerical Analysis
- Date Compression

Venture Start-up Factories

“Factories for Experiencing Starting Up Ventures” is the name given to courses taught using PBL (Project Based Learning: project-based problem-solving learning), a practical educational method that has been attracting educators’ attention. Students identify issues relevant to the University, companies or the region, and work in teams to address a particular development theme and implement their solution. They can also receive advice directly from professional engineers and experience starting-up a venture business and / or developing software under circumstances similar to those in the actual industrial world.

Specialized Courses

Specialized Courses are categorized into five groups; “Computer Systems”, “Computer Network Systems”, “Applications”, “Software Engineering”, and “Other Courses”. Through these courses, students will gain confidence as computer scientists and / or computer engineers, as they acquire essential knowledge and skills for computer specialists.

Advanced Logic Circuit Design

Associate Professor Yukihide Kohira

Advanced Logic Circuit Design is an advanced course for Logic Circuit Design which is provided in the second semester of the second year. Logic design is a design phase of digital VLSI (Very Large Scale Integrated) circuits such as CPU (Central Processing Unit) in computer systems. Logic design is to design functionalities of digital VLSI circuits using logics (0 and 1).

In Logic Circuit Design, students study the basic knowledge of logic design. On the other hand, in Advanced Logic Circuit Design, students study an HDL (Hardware Description Language) to model functionalities of digital VLSI circuits and logic synthesis tools to automatically synthesize a logic design from an HDL model.

CATEGORY

Computer Systems and Related Courses
- Comp. Organ. and Design
- Electronics
- Advanced Electronics
- Embedded Systems
- Parallel Computer Architecture
- VLSI Design
- Advanced Logic Circuit Design
- VLSI Device Technology
- Computer System Engineering

Computer Network Systems and Related Courses
- Communication Networking I･II
- Computer Network Organization & Design
- Digital Comm. Sys. Performance Evaluation

Applications and Related Courses
- Artificial Intelligence
- Comp. Graphics
- Image Processing
- Biomedical Inf. Technol.
- Robotics and Automatic Cntr.
- Human Interface and Virtual Reality
- Linear Systems
- Digital Signal Processing

Software Engineering and Related Courses
- Web Engineering
- Web Programming
- Software Eng. I･II
- Software Studio
- Distributed Computing

Student Cooperative Class Projects (SCCPs)

SCCPs enable first year students to choose projects of interest to them and think about graduation research themes while taking part in practical classes and training. Given that it is difficult for first-year students to engage in high-level research, SCCPs are designed in such a way that students can carry out research without special knowledge and skills. The advantage of taking these courses is that students are able to visit laboratories soon after enrollment at the University and deepen exchange with faculty and seniors when, for example, asking for advice on learning and research.

Exploring the World of Intelligence

The Department of Computer Science and Engineering is the sole department at the Undergraduate School of the University of Aizu, which consists of the Division of Computer Science, the Division of Computer Engineering, the Division of Information Systems, the Center for Cultural Research and Studies, and the Center for Language Research. The Graduate School of the University of Aizu consists of the Graduate Department of Computer Science and Engineering, and the Graduate Department of Information Technology and Project Management. All of our excellent faculty members are devoting themselves to conducting research in their fields. As an effort to deepen research at the University, professors by special appointment are proactively invited from private companies and universities.

Computer Graphics Laboratory

Research

Pierre-Alain Fayolle

Associate Professor

From France
Ph.D., Graduate School of Computer Science and Engineering, the University of Aizu

Main Research Theme
Shape modeling and approximation, shape optimization, shape understanding, interactive geometric modeling, numerical simulation and modeling

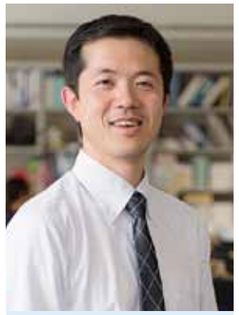
Our laboratory is committed to education and research on computer graphics, augmented reality, physics simulations, 3D modeling, etc. For example, we use sets of points scanned from a solid surface to reconstruct 3D shape, including polygonal meshes, and divide reconstructed 3D shapes into segments.

In addition, we account for moves involved in the transformation of one 3D shapes into another, and use GPUs (Graphic Processing Unit) to write and execute various algorithms.

Feel free to visit our laboratory if you are interested in computer graphics!

Computer Organization Laboratory

Research



Hiroshi Saito

Senior Associate Professor

From Fukushima Prefecture, Japan
BS, Undergraduate School of Computer Science and Engineering, the University of Aizu
Ph.D., Department of Advanced Interdisciplinary Studies, School of Engineering, the University of Tokyo

Main Research Theme
Automated design of VLSI asynchronous circuits, and hardware/software co-design and formal ratification of System LSI

Electronic systems embedded in home appliances and cars to facilitate control and processing are called “embedded systems”.

In the Computer Organization Laboratory, we conduct research on minimization of power consumed by digital circuits in such embedded systems. To be specific, we strive to lower power consumption by using asynchronous circuits, which allow partial control through demand and answer signals. We are also developing a CAD tool to realize automatic design of asynchronous circuits for large-scale systems.

Demand for low-power consumption embedded systems is expected to further increase, so we intend to concentrate on systems that deal with emerging issues.

Computer Arts Laboratory

Research

Satoshi Nishimura

Senior Associate Professor

From Saitama Prefecture, Japan
D.Sc. in computer science, Postgraduate Course in Science, University of Tokyo Graduate School

Main Research Theme
Parallel algorithms and architecture for computer graphics, special hardware for real-time ray tracing, description languages for music and graphics

The Computer Arts Laboratory focuses on research related to computer generation and recognition of sounds and images. In order to synthesize sounds and images as realistically as possible, computational methods need to be carefully examined. Furthermore, to achieve the speed required for practical calculation, parallel computing using many computers simultaneously and development of a system with new structure are necessary. For sound / image recognition, new ideas and ingenuity are needed to improve recognition rate and speed.

“Score tracking” is one of our prioritized research themes. This technology enables computers to analyze sounds generated by musical instruments and detect which part of a score is being played. The technology has already been put to practical use in electronic musical instruments, but not in acoustic musical instruments. If the technology is completely established, users will be able to use the “automatic score-turning” function while music is played, and play music using an “automatic timing adjustment” function with other audio recordings and images.

Image Processing Laboratory

Research

Keitaro Naruse

Senior Associate Professor

From Hokkaido, Japan
Doctor (in Engineering), Precision Engineering Studies, Graduate School of Engineering, Hokkaido University

Main Research Theme
Development of a new communication medium using virtual creatures and robots through networks, construction of human-computer interface using multiple senses, mechanism of recognition, artificial life-intelligence-society, etc.

One example of an application of image processing technology being developed by the Image Processing Laboratory are the “Aigamo” rice paddy weeding robots. Moving around to thoroughly cover the entire rice paddy, the Aigamo weeding robot prevents weeds from sprouting in rice paddies by forcing their seeds to the top of the water.

In order to make this possible, the robot needs (1) a waterproof, mud-proof body, (2) wheels capable of rolling on soft ground, (3) image processing-based position estimation, (4) automatic route planning for complete coverage of the rice paddy, and (5) wireless network-based controls. We are working on these technologies in order to realize robotic rice cultivation.

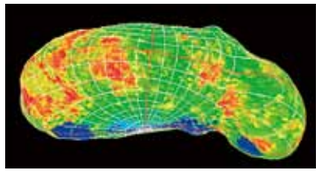
Further, in order to make the remote operation of the robot easier, a user interface is being developed that presents a view from the rear by processing the images from the robot’s cameras with viewpoint translation technology.

Creation of State-of-the-art Technologies

The Research Center for Advanced Information Science and Technology (CAIST) was established in April 2009 as an organization for conducting cutting-edge research on computer science and engineering in collaboration with outside organizations and institutions. CAIST comprises three prioritized research clusters, namely, Aizu Research Cluster (ARC)-Space, ARC-Environment and ARC-Medical. All clusters have ongoing projects and a large number of our students are involved in these projects.

One of the characteristics of our education is "top-down education", in which students are first exposed to research fronts and cutting-edge research achievements (top) and then required to think about the fundamental knowledge they should acquire (down) to attain such productive achievements. Students who have taken on the challenges of world-class cutting-edge research through joint projects with outside organizations have shown remarkable advancement in their studies and research. CAIST aims to rejuvenate local regions and create new industry by making best use of research achievements that directly respond to social needs.

Aizu Research Cluster for Space Science (ARC-Space)



3D GIS for Irregular Bodies
A brightness map of Asteroid Itokawa's visual light range visualized by 3D GIS

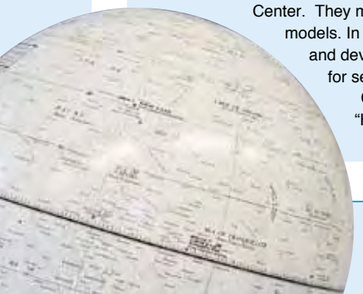
ARC-Space is involved in national deep space exploration projects, such as Hayabusa, an asteroid probe project, and Kaguya, a lunar exploration project. Taking advantage of our being a university sorely dedicated to computer science and engineering, we engage in research on lunar and planetary data analysis techniques and development of measurement hardware.

Our university's innovative research has helped ARC-Space to further contribute to Japan's space exploration by functioning as a center for providing Geographic Information System (GIS) software and information analysis techniques. ARC-Space is also unique in its provision of firsthand education. Students supervised by ARC-Space faculty are encouraged to join collaborative R&D activities with researchers in different fields of specialization. Involvement in such research collaborations enables students to experience working in a project team.

From "HAYABUSA" to "HAYABUSA 2"

Each from the Minister of State for Space Policy, and the Minister of Education, Culture, Sports, Science and Technology (MEXT), a letter of appreciation was awarded to HAYABUSA Project of Japan Aerospace Exploration Agency (JAXA) and to its mission support team constituted of about 120 universities and companies including UoA. The Ministers honored the remarkable accomplishment of the mission to bring particles of asteroidal origin back to the Earth for the first time in the world. Our students, when "HAYABUSA" was in operation, took turns in engaging work at the Mission Control Center. They made various contributions to the project, not limited to creation of geometry models. In addition to "HAYABUSA" Project, ARC-Space is actively working on research and development for data visualization technique/geographical information system for selenological and engineering explorer "KAGUYA".

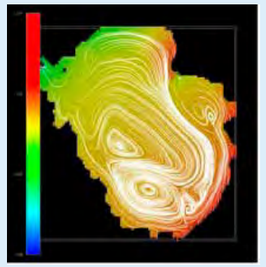
CAIST/ARC-Space professors and their students are also engaging in "HAYABUSA 2" Project that started after "HAYABUSA" Project. We look forward to having students with ambition and high motivation to do research in front line of asteroid rendezvous, etc.



Aizu Research Cluster for Environmental Informatics (ARC-Environment)

Toward realization of a convenient and comfortable society that co-exists in harmony with a rich natural environment, ARC-Environment has been working on innovative environmental informatics by blending our university's cutting-edge informatics and environmental sciences such as meteorology, water and atmospheric sciences. The Japan Agency for Marine-Earth Science and Technology (JAMSTEC) and the University of Tokyo are partner institutions for the aforementioned research. By having our students involved in our projects, we also aim to nurture human resources who have both a profound insight into natural environments and specialized knowledge of cutting-edge informatics, and who can contribute toward solving diversified global environmental issues.

High-resolution Weather Information Data Distribution System



Simulation of Water Currents of Lake Inawashiro

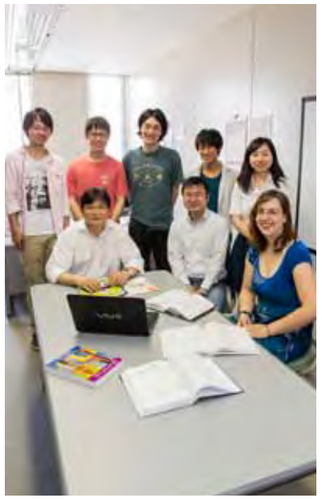
Pollen Alert Application (iPhone)

Aizu Research Cluster for Medical Engineering and Informatics (ARC-Medical)

Taking full advantage of our university's excellent human resources in information science and engineering and its cutting-edge and consistent knowledge of software engineering, ARC-Medical is dedicated to wide-ranging research in the field of human health with a focus on medicine and medical care. Development of materials and systems for immediate and practical use at hospitals and in society is an important part of our focus.

Development of an "e-mental health system" for residents of Fukushima Prefecture

ARC-Medical is developing a "mental health self-check system" to protect the mental health of UoA students and other residents of Fukushima Prefecture. The system evaluates mental immunity and balance among sympathetic, parasympathetic and autonomic nerves by checking changes in mental status through time-series measurement and non-linear analysis of biosignals (e.g. pulses from finger tips or ears). The system stores measured data, which enables users to learn about themselves by checking past and present data on their mental health status. The system is expected to be utilized for early detection of diseases through provision of services via computer networks.



In-depth Learning

Graduate School

of
Computer Science
and Engineering

The Graduate School of the University of Aizu was established in April 1997, as a place for pioneering research and education which contribute to the international society.

Taking advantage of our excellent educational environment and faculty members who have various backgrounds, we offer diversified courses and nurture human resources with creative mind, while taking into consideration advice from domestic industries. In order to help students acquire problem-solving skills needed in the global society, classes are conducted in English, in principle.

Develop practical skills

Master's Program
- Graduate Department of Computer and Information Systems
- Graduate Department of Information Technology and Project Management

Develop creative mind

Doctoral Program
- Graduate Department of Computer and Information Systems

Academic Excellence

Quarter System

Diversified courses are offered in this system to respond to needs for fostering of human resources rich in creativity.

Information Technology Education in English

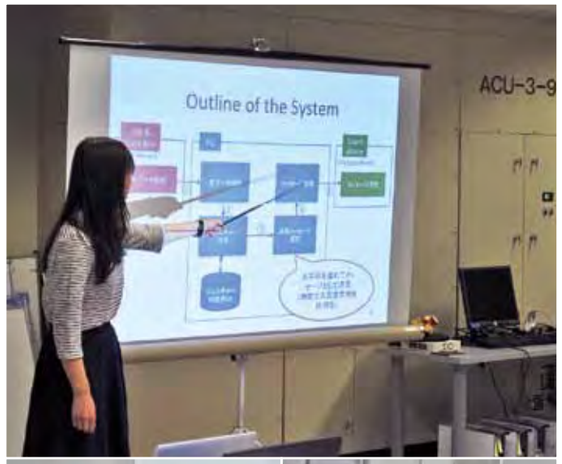
Almost 100% of programs at the University of Aizu Graduate School, including lectures, seminars, research projects, are conducted in English.

International Dual-Degree Program

Students in master's and / or doctoral program of universities with which the University of Aizu concluded relevant agreements can obtain a degree from both universities.

Research Assistant (RA) System

In addition to the Teaching Assistant (TA) System adopted in the Master's Program, an RA System has also been introduced in the Doctoral Program for the purpose of reinforcing the research support system and developing students' ability to conduct research early in their careers as well as financially supporting graduate students by offering remuneration for their work.



Master's Program

Graduate Department of Computer and Information Systems

On the basis of the education at our Undergraduate School of Computer Science and Engineering, research on structures and functions of "information" is conducted by solving real-life problems using computer systems.

Graduate Department of Information Technology and Project Management

This Department aims at solving practical problems associated with the IT industry. Students, while working on development of various practical software in teams, will acquire leading-edge information technology and become pioneering IT specialists.

《Curriculum》

There are three course categories;
(1) Conversion Courses, (2) Regular Courses and (3) Seminars.

Structure of the Program

Selection of a Graduate Department

Graduate Department of Information Technology and Project Management	Graduate Department of Computer and Information Systems
Selection of a project team including a coach and advisors	**Selection of a research project** including curriculum and research advisors

Testing of proficiency in the English language

Education through Research and Solving Practical Problems — Team	Education through Research — Individual
8 units, 20 units, 22 units	8 units, 6 units, 16 units
Academic credits required for completion of the program: 50 units	Academic credits required for completion of the program: 30 units
Software Development Arena, Specialized Courses, Seminars	Thesis Research, Specialized Courses, Seminars

Testing of proficiency in the English language

Completion of the program (Master's Degree)	Completion of the program (Master's Degree)
Certificate of completion of the Leading-Edge IT Specialist Program and Special Certificate of Honor	

Program for Leading-Edge IT Specialists

A new program to foster internationally educated experts in leading-edge information technologies. This program is supported by a number of companies, organizations and universities.
Companies: 16 companies
Organizations: MDI (India), JAXA (Japan Aerospace Exploration Agency), National Astronomical Observatory of Japan and two other organizations
Universities: Technical University of Munich (Germany), California Institute of Technology (U.S.A.) and eleven other universities

Doctoral Program

Graduate Department of Computer and Information Systems

In our Doctoral Program, an environment has been established in which students are given opportunities to receive interdisciplinary guidance both in terms of research and education, so that they can generate research achievements meeting the needs of the times.

《Curriculum》

The Doctoral Program does not offer any regular courses excepting the course, "Theses Research", comprising of Special Seminars and Special Research.

Special Seminars

In special seminars, students are expected to acquire specialized knowledge including research methodologies through literature study and assistance for their supervisors in planning syllabuses for Master's Program seminar courses.

Special Research

Students conduct research under guidance and advice from their supervisors. There are two formats in Special Research; (1) Special Training Programs and (2) Creative Factory Seminars.

●Special Training Programs (Internship Programs)

Students are provided with opportunities to have hands-on experience at companies or government institutions, which are deeply associated with the fields of students' Special Research.

●Creative Factory Seminars

While Special Seminars are conducted under supervision of one advisor in principle, Creative Factory Seminars are conducted under the guidance of multiple faculty members from different fields, and / or researchers at private sectors. Through joint research with external organizations, students will be able to generate high-quality and timely research achievements from both industrial and academic perspectives.

Job Opportunities at Renowned Companies Inside and Outside Japan

The University of Aizu provides fulfilling computer education, and produces high-quality computer specialists. Ever since its establishment, the job placement rates of students completing our Graduate School have been maintained at 100%. As for students graduating from our Undergraduate School, the job placement rate averages 98%. Our graduates have gained a high reputation from renowned companies inside and outside Japan.

Key Employers (in the past 3 years)

Undergraduate School

East Japan Railway Company
Murata Manufacturing Co., Ltd.
Japan Digital Laboratory Co., Ltd.
KAYAC Inc.
Nomura Securities Co., Ltd.
Japan Post Co., Ltd.
Kakaku.com, Inc.
NTT DATA TOHOKU CORPORATION
NTT Communications Corporation
Excite Japan Co., Ltd.
DWANGO Co., Ltd.
Cyber Agent, Inc.
Toyota Technical Development Corporation
Hitachi solutions, Ltd.
NTT-ME CORPORATION
NEC Soft, Ltd.
OKI Software Co., Ltd.
FUJITSU FSAS INC.
THE GUNMA BANK, LTD.
Alpine Information System, Inc.*
Asahi Systems Co., Ltd.*
SYNC, Inc.*
F-COM Co., Ltd.*
Jusendo General Hospital*
Takeda General Hospital*
THE TOHO BANK, Ltd.*
The Fukushima Bank, Ltd.*
The Daito Bank, Ltd.*
Alpine Giken, Inc.*

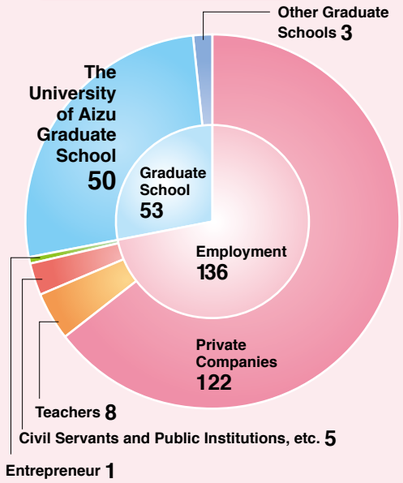
Graduate School

FUJITSU LIMITED
Hitachi, Ltd.
Sony Corporation
Oracle Corporation Japan
Panasonic Corporation
Canon Inc.
Hewlett-Packard Japan, Ltd.
Cisco Systems G.K.
Toyota Technical Development Corporation
Accenture Japan Ltd
Mitsubishi Space Software Co., Ltd.
NS Solutions Corporation
JR East Japan Information Systems Company
NOCHU INFORMATION SYSTEM CO. LTD
NIPPON TELEGRAPH AND TELEPHONE EAST CORPORATION
NTT DOCOMO, INC.
SoftBank Mobile Corp.
Google, Inc.
LINE Corporation
CROOZ, Inc.
GREE, Inc.
NIFTY Corporation
Nomura Research Institute, Ltd.
Aizu Olympus Corporation*
Fukushima Canon Inc.*
NEC Network Products. Ltd.*
East Japan Accounting Center Co., Ltd.*
Fukushima Information Processing Center*
Ohta General Hospital Foundation*
TV-U Fukushima, Inc.*

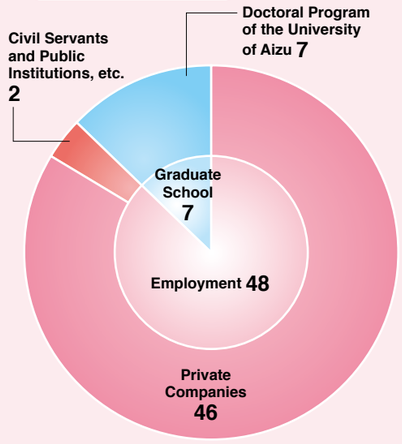
*companies in Fukushima Prefecture

Career Paths (AY 2013)

Undergraduate School



Graduate School



*Data regarding Master's students

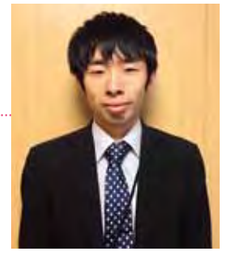
Dear the University of Aizu

Our alumni are displaying their abilities as computer engineers, researchers, business entrepreneurs, etc. in various fields. Here are messages from our graduates, who are active in the front lines, about their experience at the University and current job.

1) What kind of research did you conduct at the University?
2) Please tell us about your current job.
3) How do you utilize your experience at UoA in your job?
4) Please give advice to prospective students of the University of Aizu.

Oracle Corporation Japan

Mr. Koichi Noda



1) Throughout my time as both an undergraduate and graduate student, I belonged to the Active Knowledge Engineering Laboratory and was taught by Associate Professor Rentaro Yoshioka. As a graduate student, I used issues at actual companies as model cases and conducted research on issues pertaining to legacy systems at Japanese companies in collaboration with an international student from Tanzania and a working adult.

2)My primary duty is marketing and introduction of our products to customers in the manufacturing industry.

3) When I started to work in the IT industry, I was immediately able to put the experience I had gained at the University of Aizu to work. My knowledge of Unix, programming, and security has been of great use since I was assigned to my current department. In particular, the hands-on experience I received at the UoA Graduate School (Department of Information Technology and Project Management) gave me confidence, which helped both during my job-hunting days and in my present professional life.

4) One of advantages of studying at UoA is that you can learn both IT and English. There are not many universities like this. When you are enrolled at the University, try to make full use of everything that UoA has to offer. In particular, I strongly recommend that you apply for and participate in its international exchange programs.

Aizu Laboratory, Inc.

Entrepreneurs of the University-led Business Ventures

In the Aizu region, exchanges among regional industries are very active, and entrepreneurial spirits are widely-spread. In such an environment, many venture companies have been incubated by the University of Aizu. According to the survey conducted by the Ministry of Economy, Trade and Industry in 2008, UoA was ranked first in the number of university-led venture companies among national and public universities in Japan.

Here is a message from one of our graduates who started a venture company.

CEO, Masayuki Hisada

1) My research theme at UoA was feature extraction for 3D models. Human beings can recognize shapes and features of things unconsciously, but computers cannot. I was especially interested in feature extraction of lines such as mountain ridges and valleys.

2) After graduating from UoA, I worked as a university lecturer for a while. However, I returned to Aizu and started a business in 2007 to realize the dream of my supervisor, the University's first President Toshiyasu Kunii, which was to create a silicon valley in Aizu. My company focuses on development of smart phone applications and cloud computing technologies.

3) If you work with computers, you will need to use English time and again. Reading, listening and speaking English are all required to engage in business. At UoA, and especially in the laboratory I belonged to where English prevailed as the language of choice due to the presence of non-Japanese professors, I was able to acquire and improve the English skills needed for everyday life.

4) To learn computer science is to learn the infinite potential of computers. I have expertise in computer graphics, security, cloud computing, etc., but continue to pursue R&D opportunities in other new fields. Why don't you open the door to infinite possibilities at UoA?

Facilities Well-designed to Support Learning

On our spacious campus, we have a wide variety of health and welfare facilities to enable students enjoy a rewarding university life both in terms of studying and sports/cultural activities. For example, the indoor swimming pool available for year-round use and Study and Research Living Unit (SRLU) equipped with fitness machines and body-sonic systems accessible at any time of the day and night.

1 Auditorium

This multipurpose auditorium accommodates variable seating (maximum of 460 seats). The auditorium is used for campus events and is open to the local community. Symposiums and lectures are frequently held, and this has been contributing to cultural activities for the local community. Entrance and degree conferment ceremonies are also held here.

2 Cafeteria

Nutritionally-balanced and hearty lunch sets, and a variety of freshly-made dishes are served. Carefully-prepared homestyle meals are provided.

3 Library

Our university library houses approximately 127,000 volumes. A large number of academic journals and foreign books related to computers are available.

4 Coffee Shop

Various drinks such as coffee and cafe latte are served. In addition to these drinks, homemade waffles are also popular.

5 SRLU (Study and Research Living Unit)

Equipment for physical strength training and body-sonic systems are available 24 hours a day.

6 Athletic Field

Extending against the background of Mt. Bandai, our sports field accommodates a variety of outdoor sports, including soccer.

8 Gymnasium Complex

Students and faculty enthusiastically engage in indoor sports in our gym which affords the warmth of a wooden building.

9 Indoor Swimming Pool

Our heated swimming pool is available for year-round use. Its unique design features a wooden roof.

10 Martial Arts Hall

This hall is used for martial arts such as kendo and aikido (art of weaponless self-defense). Martial arts have long flourished in Aizu.

7 "Somei House", the Housing Facility to Support Learning for Students at the University of Aizu

Students from all over Japan and countries worldwide acquire social skills and cooperativeness through communal living in shared facilities. This housing facility was established in 2011 to enhance students' motivation to learn by supporting their campus life.

About Somei House

Capacity: 80 students (70 male and 10 female students)
Eligibility for Residency: New undergraduate students and self-financed international students enrolled at the University of Aizu
Meals: Meals are not provided. (There is an on-campus cafeteria open from 11:00 a.m. to 8:00 p.m.)
Selection of Residents: Selection of residents shall be carried out by the University of Aizu.
Other: A Somei House Resident Assistant (SRA) will be assigned in each Unit (a group of 10 residents) to provide assistance.

Open Living Room

Each floor has two open living rooms with a kitchen for shared use by its residents. Cooking utensils are equipped there. Residents also study, talk, watch TV, and have a relaxing time together.

Laundry Space

There are four washing machines on each floor.

Residence Rooms

Each floor has 20 residence rooms, each of which is furnished with a bed, a closet, a desk and a chair, an air-conditioner and an intercom.

Shower Rooms / Washstands

There are four shower rooms on each floor. Each floor has washstands. The 4th floor is designed for female residents and there is a washstand equipped with a handheld shower furnished for shampoo. (Photo) The other floors have ordinary washstands.

Fully enjoy life in Aizu!

University Vicinities

Populated by some 122,000 people, Aizu-Wakamatsu City has been well known as a castle town with its long history, including a tragic Byakkotai (a corps of teenage samurais) and its relation with Shinsengumi (a group of samurai warriors based in Kyoto in the Edo era). The region sprawls to the magnificent "Mt. Bandai", "Lake Inawashiro", "Kitakata City" famous for warehouse and ramen and "Oze National Park". You will have great experience in Aizu.

❶Tsuruga Castle

Tsuruga Castle is a symbol of Aizu-Wakamatsu City where many military commanders resided in times gone by. In 2011, the Castle's roofing tiles were replaced by red tiles to look as it did in the Edo Period. The Castle area is a popular location for ohanami (cherry blossom viewing parties) in spring.

❷Aizu Matsuri

Held annually in September, Aizu Matsuri is the city's most famous festival. A festive mood overtakes the city during the Aizu Clan Historical Parade when about 500 citizens dressed as samurai, daimyo and young Byakkotai warriors parade around the town.

❸City of Kura (Old Warehouses)

In the City of Kitakata, there are approximately 4,000 kura warehouses with stucco or brick construction still in use, including those for sake or miso (bean past) making. Enjoy walking around the City, and encounter various types of kura including kura-zashiki (tatami guest rooms in kura) and renga-gura (kura built of bricks).

❹Higashiyama Onsen

Higashiyama Onsen is a hot-spring resort founded about 1,300 years ago, located on the east side of Aizu-Wakamatsu. Its scenic beauty and history have attracted many people including artists such as Akiko Yosano (1878 - 1942, a famous Japanese female author and poet) and Yumeji Takehisa (1884 - 1934, a famous Japanese male poet and painter).

❺Lake Inawashiro

Lake Inawashiro is also known as "Tenkyo-ko" (the lake of the heavenly mirror) since its surface reflects the figure of Mt. Bandai throughout the year, and is the 4th largest lake in Japan. You can enjoy swimming and wakeboarding in summer and see the mystical natural ice sculptures called "shibuki-gori" in winter.

BAN-ETSU EXPRESSWAY and evening view of the City

City Loop Bus "Haikara-san"

Okiagari-koboshi dolls symbolizing never-give-up spirits

Oyaku-en Botanical Garden

❻Oze National Park

Oze National Park is an area consisting of open Greenland in Fukushima, Tochigi, Gunma and Niigata Prefectures. Surrounded by high mountains (approx. 2,000 m), Oze has numerous marshes and over 900 species of alpine plants such as mizu-basho (skunk cabbages) and nikko-kisuge (day lilies), which attract many hikers.

会津大学

Tsuruga, Ikki-machi, Aizu-Wakamatsu City,
Fukushima, 965-8580, Japan

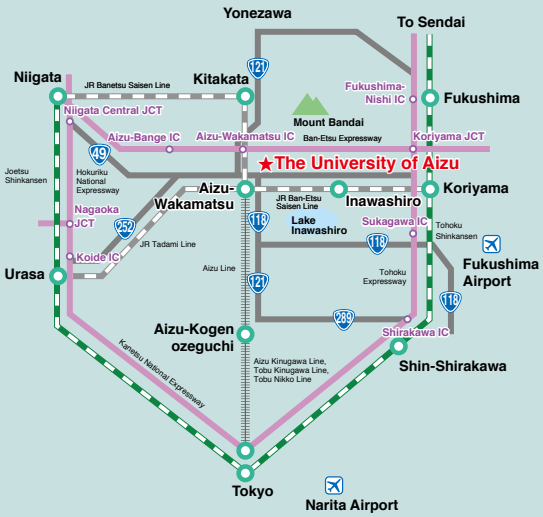
http://www.u-aizu.ac.jp

Student Affairs Division

Tel: 81-242-37-2600　Fax: 81-242-37-2526
e-mail: admission@u-aizu.ac.jp

Planning and Collaboration Division

Tel: 81-242-37-2510　Fax: 81-242-37-2546
e-mail: cl-planpr@u-aizu.ac.jp



Access

■ By Train

From Tokyo (JR Tohoku Shinkansen): About 2 hours and 40 min.
From Narita Airport via JR Ueno Station: About 3 hours and 20 min.
From Sendai (JR Tohoku Shinkansen): About 1 hour and 50 min.
From Aizu-Wakamatsu Sta. (by bus/taxi): About 10 min.

■ By Highway Express Bus (to Aizu-Wakamatsu Station)

From Shinjuku Station (South Exit): About 4 hours and 20 min.

■ By Car

From Tohoku Expressway Kawaguchi JCT: About 3 hours and 20 min.
From Tohoku Expressway Sendai JCT: About 2 hours
From Ban-Etsu Expressway Misato JCT: About 3 hours and 50 min.
From Ban-Etsu Expressway Niigata JCT: About 1 hour and 40 min.
From Ban-Etsu Expressway Aizu-Wakamatsu IC (121+49): About 10 min.

■ Fukushima Airport

From Fukushima Airport (by express way): About 1 hour and 50 min.