

NAIST® Global Initiatives Program

for Promoting Overseas Collaborative Research Toward Graduate Education
in Biological Sciences, Nano Science, and Information Technology



Overview

Overview of Global Initiatives Program

The Global Initiatives Program for Promoting Overseas Collaborative Research Toward Graduate Education in Biological Sciences, Nano Science, and Information Technology (Global Initiatives Program) was started with funding from the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) in 2011.

This program aims to establish and develop joint research opportunities for students enrolled at NAIST and our overseas partner institutions. Moreover, the Global Initiatives Program strives to cultivate active members of the global science community and further establish NAIST as a globally recognized graduate education center. The Global Initiatives Program has an annual budget of roughly \$500,000 - \$600,000 (USD) over a 5-year period starting April 2011.



Background

Japanese graduate schools are being called upon to support the rapid redistribution of roles and responsibilities between Japan and the rest of the world. Globalization is essential for the cultivation and application of science and technology in emerging countries experiencing significant economic growth, and is integral to the secondary education that supports these advancements.

The Global Initiatives Program aims to improve global competitiveness by promoting the globalization of NAIST's graduate school education in order to develop global leaders. The program focuses on promoting and facilitating student participation in overseas collaborative research, while utilizing NAIST as a global center for graduate school education.

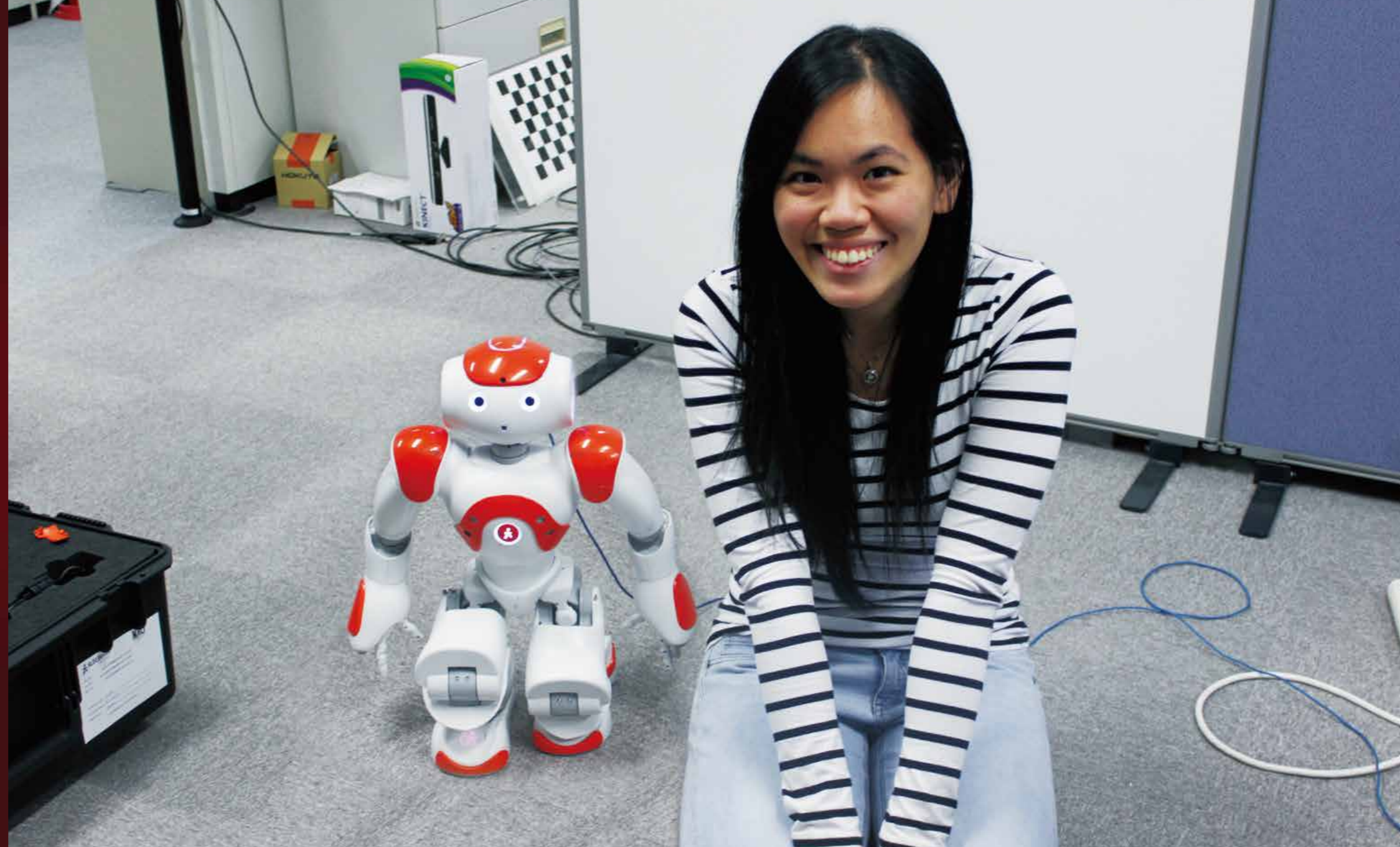


Activities

Program Outline and Eligible Activities

In order to further globalize and increase the level of NAIST's education, the following three types of projects are supported under this program:

- 1) Collaborative Graduate Research: Students enrolled at NAIST and its partner institutions are encouraged to engage in faculty-guided, face-to-face collaborative research. These research exchanges are valuable opportunities for students to participate as members of the global science community.
- 2) International Student Workshops: In cooperation with partner institutions, students participate in international workshops giving presentations and taking part in discussions in English in order to develop communication skills, exchange views on research with fellow graduate students, and develop ties with researchers and students around the globe.
- 3) International Student Internships at NAIST: NAIST invites students from diverse backgrounds to experience NAIST's research and educational environment, further encouraging on-campus global exchange.



Projected Student & University Outcomes

- Students will attain a broad understanding of research and education in the global scientific community.
- Students will have the necessary experience to foster ties and build global networks for future research and collaboration.
- Students will have hands-on experience in various environments, forming a strong base for participation in academia and industry.
- Students will have improved communication skills through a variety of collaboration and communication, and interacting with a diverse population of researchers and students.
- NAIST will set itself apart as a model for graduate school education in Japan.
- NAIST will strengthen its position as a global hub for research and education.
- NAIST's exchange and acceptance of top-level researchers will contribute to the improvement of Japan's academic and research environment.



Student Testimonials

“There were numerous benefits to visiting laboratories which conducted research similar to mine. In this program, I received advice about my research, heard new views on my research, and developed new ideas. I’m grateful for this program.”

Taizo Tamura
NAIST Graduate School of Biological Sciences
Participated in collaborative graduate research at
The University of British Columbia, Canada,
March 26 - April 5, 2012

“I came to understand that the exchanging of opinions about research is the most enjoyable and important part of global cooperation.”

Manami Tsukamoto
NAIST Graduate School of Materials Science
Participated in collaborative graduate research at
University of Michigan, U.S.A.,
September 1 - December 14, 2011

“At NAIST, you not only receive a high standard of education in classrooms with modern facilities, but you also enjoy a peaceful life in a fresh environment. The research facilities of NAIST were excellent, allowing me to carry out my research without any obstacles or difficulties.”

Dao Sy Duc
Hanoi University of Science, VNU, Vietnam
Internship student at NAIST Graduate School of
Materials Science,
October 1 - November 20, 2011



Student Testimonials

Student Testimonials

“To diffuse scientific knowledge, it is really essential to arrange this kind of technical workshop globally. I hope in the future there will be more and more workshops like this one, which will lead the science community towards progress and success.”

MD. Zobaer Hasan
NAIST Graduate School of Biological Sciences
Attended an international student workshop at
Universitas Gadjah Mada, Indonesia,
March 14 - 22, 2012

“I realized it is important to discuss and collaborate with other researchers to further my research. This experience, from the background research and experiment development to the actual experiment and presentation, built my confidence and I had a great sense of achievement.”

Michiko Matoba
NAIST Graduate School of Information Science
Participated in collaborative graduate research at
Oulu University, Finland,
August 30 - November 26, 2011

“I never imagined that I'd have the chance to be an intern in Japan at NAIST, in an environment so focused on research. It was beneficial to work here with such a helpful professor and students, they tried to help me in every possible way. I met so many different people and learned about so many various things. What I have gained through this summer internship will not only help in shaping my career, but also I feel it has contributed much to my personal development.”

Sushant Gaurav
Indian Institute of Technology Rajasthan, India
Internship student at NAIST Graduate School of
Information Science,
May 5 - July 19, 2012



Student Testimonials

“Together with NAIST students and professors, we worked very hard to finish a sub-branch of the collaborative project. The laboratory had many very advanced instruments, allowing for accurate simulation and verification of our ideas.”

Li Linfeng

Tsinghua University, China

Participated in collaborative graduate research at NAIST Graduate School of Information Science, September 26 - October 16, 2011

“I felt honored to work with a professor that is internationally renowned. All of the members of the laboratory were nice and they are very accommodating towards international interns. They helped me understand the research conducted in the laboratory and I learned to work as a team member in research activities. Our conversations were in English, so I was also able to improve my English skills.”

Chaiyanan Kulchaisit

Kasetsart University, Thailand

Internship student at NAIST Graduate School of Materials Science, April 22 - June 30, 2012

“This experience was amazing. I loved hearing about all the different types of research and interacting with colleagues from across the world. This was a wonderful opportunity to speak with collaborators I had only interacted with via email. While before this program I believed it was easier to collaborate with laboratories only in the US, I now think it is incredibly important to have connections with other scientists around the world. The scientific community is a global one, and we can all benefit from close communication and collaboration.”

Mallorie Taylor

University of California, Davis, U.S.A.

Attended an international student workshop at NAIST Graduate School of Biological Sciences, November 10 - 17, 2012



Faculty Testimonials

International Student Internships at NAIST

We invite students from our partner schools for the internship program at NAIST. Research interests of the participants are matched beforehand to ensure that they are able to conduct project-based practice or short-term research in the laboratories. As a result, the participants gain new knowledge and perspectives to further their research projects. They also become familiar with the research projects, educational programs and research/educational environment at NAIST and are provided with opportunities to explore Japanese culture.

Hiroyuki Seki, Professor
NAIST Graduate School of Information Science

NAIST Bio International Student Workshop 2012

I believe that the workshop was an invaluable experience for all participating students and faculty. Students were organized into three smaller groups based on general areas of interest and concurrent sessions were held to allow for longer and more informal talks that encouraged questions and significant group participation. Having students from three different countries sharing rooms, meals and cultural visits, made bonds that I believe will last beyond this experience. The workshop provided a unique perspective into the collaborative and international nature of modern science.

Ted Powers, Professor, UC Davis
Invited by NAIST Graduate School of Biological Sciences

Collaborative Graduate Research with James Cook University

Dr. Michael Oelgemöller, Associate Professor of Applied and Green Photochemistry Group at James Cook University in Australia, hosted 2 NAIST students for 3 months to acquire new methods of organic compound synthesis through photo-reaction using various devices. As a result, my students gained new research knowledge and skills and increased their English and communicative abilities to conduct research in a global environment. They have also applied their research experience toward their theses and presented their work jointly with Dr. Oelgemöller at conferences.

Kiyomi Kakiuchi, Professor
NAIST Graduate School of Materials Science



Participating Partners, FY2011–2012

Australia
Belgium
Canada
China

James Cook University
Université catholique de Louvain
The University of British Columbia
Changchun Institute of Applied Chemistry,
Chinese Academy of Sciences
Institute of Genetics and Developmental Biology,
Chinese Academy of Sciences
The Hong Kong Polytechnic University
The Hong Kong University of Science and Technology
Hunan University
Liaoning University
Northeast Normal University
Soochow University
Tsinghua University
University of Oulu
Université Paul Sabatier
Jacobs University Bremen
Justus Liebig University Giessen
Karlsruhe Institute of Technology
RheinMain University of Applied Sciences
Indian Institute of Technology Rajasthan
Bogor Agricultural University
Institut Teknologi Bandung
Universitas Gadjah Mada
Universitas Indonesia
University of Cagliari

Finland
France
Germany

India
Indonesia

Italy

Korea
Laos
Malaysia

New Zealand
Philippines

Thailand

Taiwan
United States of
America

Vietnam

Hanbat National University
Pohang University of Science and Technology
National University of Laos
University of Malaya
Universiti Putra Malaysia
Universiti Sains Malaysia
Universiti Teknologi Malaysia
Unitec Institute of Technology
Ateneo de Manila University
Mapúa Institute of Technology
Chulalongkorn University
Kasetsart University
Mahidol University
National Chiao Tung University
University of California, Davis
University of Hawai'i at Mānoa
Macromolecular Science and Engineering Center,
University of Michigan
Biotechnology Institute, University of Minnesota
Hanoi University of Science, VNU
Institute of Biotechnology,
Vietnam Academy of Science and Technology
Institute of Information Technology,
Vietnam Academy of Science and Technology
Institute of Materials Science,
Vietnam Academy of Science and Technology
VNU University of Engineering and Technology



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