

INTERNATIONAL EXCHANGE ACTIVITIES 2017



INTERNATIONAL EXCHANGE ACTIVITIES 2017



CONTENTS

- **Greeting from the Director General** P.1

- **International Exchange Activities at NII** P.2 _ P.3

- **International Exchange Activities
Overview and Global Liaison Office** P.4 _ P.5

- **International Exchange Activities
based on MOUs and
Acceptance of Students from Abroad** P.6 _ P.12

- **International Collaborations** P.13 _ P.17

Greeting from the Director General



Masaru Kitsuregawa
Director General
National Institute of Informatics

所長 喜連川 優

The activities of the National Institute of Informatics (NII), as Japan's only general scientific research institute in the field of informatics, range from fundamental research conducted from a long-term perspective, to practical research aiming to resolve the issues faced by society today. While NII strives to fulfill its role as a core research institution in informatics research, it also manages the Cyber Science Infrastructure (CSI) project, which is essential to research and education activities throughout the scientific community as a whole. Through these and other activities, NII seeks to contribute to both Japanese society and to the international community.

In carrying out such research and educational activities and managing these projects, the partnership and cooperation of scientific research institutions around the world are essential. It is vital that all faculty members and staff take part in international activities proactively, in line with their own objectives and points of view.

In order to enhance such activities and to deploy them on an even larger scale in a long-term, sustained manner we established in January 2003 the Global Liaison Office (GLO), which since then has advanced highly strategic and dynamic international cooperation. As a result, (as of July 31, 2017) we have concluded memorandum of understanding (MOUs) with 104 universities, research institutes and other institutions overseas. We are actively carrying out various exchange programs with these institutions including the NII International Internship Program.

In addition, in February 2011 we launched the NII Shonan Meetings program as a distinctive initiative for international cooperation. The Shonan Meetings bring together top researchers from around the world for intensive discussions on topics in the field of informatics. Through these activities, we aim to resolve the difficult challenges of informatics and create value for the future, while also raising awareness of NII as an international research institute in the field of informatics.

国立情報学研究所(NII)は、我が国唯一の情報学の学術総合研究所として、長期的な視点に立つ基礎研究から社会の課題の解決を目指した実践的研究までを推進しています。また、情報学研究の中核研究機関としての役割を果たすこと、更に学術コミュニティ全体の研究・教育活動に必須となる最先端学術情報基盤(CSI: Cyber Science Infrastructure)の事業を展開・発展させること、そしてこれらの活動を通して、「人材育成」と「社会・国際貢献」を行うことに努めています。

このような研究・教育活動及び事業運営を行なっていく上で、諸外国の学術研究機関との連携協力が欠かせません。それには、教職員全員が、それぞれの目的と立場に応じて、積極的に国際活動を実施することが重要ですが、この活動を充実させ、長期的・持続的により大きな展開を図

るため、2003年1月にグローバル・リエゾンオフィス(GLO: Global Liaison Office)を設置し、戦略性、機動性に富んだ国際連携を推進してきました。この結果として、104(2017年7月末現在)の海外の大学・研究機関等と国際交流協定(MOU: Memorandum of Understanding)を締結し、これらの機関とNII国際インターンシッププログラムを始めとする各種交流事業を活発に行っています。

また、特色ある国際連携への取組として、NII湘南会議を2011年2月からスタートしました。NII湘南会議は、世界トップクラスの研究者が集まり、情報学分野における課題を合宿形式により集中的に議論するものです。このような活動を通して、情報学の難問を解決し未来に貢献する価値を創成し、NIIが情報学の国際的研究拠点として認知されることを目指します。





Henri Angelino
Acting Director
Global Liaison Office

客員教授 アンリ アンジェリノ

■ Objective of NII international policy

Globalization, for the best or the worse, is nowadays the key word in our society : our lives are increasingly interlinked and the ICT that support the rise of social media and social networks have a basic contribution. As virtual networks develop, rapid advance in ICT not only change the ways new knowledge is disseminated but also how scientists collaborate. Research networking is more important than ever as many of the “grand challenges” the world is facing today have scientific dimensions: international research collaboration is critical to finding sustainable solutions to problems like global warming, environment, energy, proliferation of infectious diseases, etc. It is by building global alliances/collaborations that we will be able to create sustainable solutions to protect world for future generations.

Since its creation the NII has developed a strategy to boost its international cooperation based on person-to-person relationship leading to organization-to-organization agreement in order to establish itself as an international hub of excellence in informatics in Japan

The main objectives of NII international policy are:

- To enhance the quality of research through long term partnership with world leading research institutions,
- To support the achievement of scientific excellence within the wider international framework,
- To produce significant, mutual and balanced benefits taking into account the different needs and circumstances of foreign partners whilst respecting the protection of intellectual properties,
- To facilitate access to scientific and technological knowledge outside NII and useful to NII and Japan ‘s interests,
- To increase the opportunities for its researchers,
- To promote an Asian scientific and technological culture,
- To attract excellent graduate students to do a Ph.D.

The implementation of this policy has benefit to NII researchers through exposure to new ideas, new cultures and new perspectives. It has also increased NII presence in networks of excellence : the results reaffirm the value and necessity of international cooperation.

■ Instruments

Efficient International cooperation (IC) is always a bottom up process as it relies first of all on the qualities of individual researchers and his/her overseas colleagues. Nevertheless, to implement IC some tools must be available. In that respect NII has created in 2003 the Global Liaison Office (GLO). GLO will first evaluate the quality and benefit of a possible agreement with the partner institution. After that GLO will help researchers to establish their projects using a template of Memorandum of Understanding (MoU) to start discussion with their partner. There are two sorts of MoU : for “Operation” or for “Research”. In case of “Research MoU” at least one joint project must be identified before signatures. The project is described in an annex. New projects can easily be added after signatures. MoU is signed for 5 years maximum; its renewal is submitted to an evaluation.

During FY 2014 to FY 2016 to implement International cooperation NII has financially supported two main programs: “MoU /non MoU grants” and “NII International Internship -N4I”.

There is twice a year an internal call for “MoU/Non MoU grant”: some financial support is available under GLO supervision for exchange of researchers (post-docs. up to senior researchers), graduate students, technical staff, etc.

There is also twice a year a “call for applications” to N4I for Master or Ph.D students from partners institutions: after final approval by GLO selected applicants will work at NII for 2 to 6 months on projects proposed by NII researchers. The accepted

intern receives a scholarship from NII. The staying could be extended on a common base agreement up to 10 months.

Last but not least NII has launched “NII Shonan Meetings” following the well-known Dagstuhl Seminars: top-class scientists, promising young researchers and practitioners come together to Shonan Village to exchange their knowledge, discuss their research findings, and explore a cutting-edge informatics topic.

■ Some key recent results

In the frame of its NII International Policy NII up to FY 2016 has signed 105 MoU , 97 are “MoU research” supported by at least one joint research project: 61.8% in Europe ,26.8% in Asia - Pacific and 11.4% in North America. The last one has been signed with the Royal Institute of Technology (KTH) in Stockholm (Sweden). Moreover additional MoU are under discussion to select the convenient joint research project with RMIT-Melbourne, UNSW-Sydney in Australia, Indiana University and Illinois University at Urbana Champaign in US, Trinity College Dublin in Ireland and last but not least the first one in India with IIT New Delhi and the first in Russia with Skolkovo Tech(Skoltech)that has been established in 2011 in collaboration with MIT. During the last 3 Fiscal years ,FY 2014 to FY 2106 NII has:

- accepted 376 interns from partner institutions staying in average 4.5 months; for the first call FY 2017 we have already accepted 84 interns,
- Published many papers in international Journals or conferences with review : 314 in FY 2014 incl. 214 with partners co-authors – 68.1 %, 380 in FY 2015 – 74.7% with partners co-authors,
- Obtained many awards in international conferences, quite often in association with partners researchers and/or interns, : 36 in FY 2014, 42 in FY 2015 and 66 in FY 2016,
- Received 133 visiting guest supported by GLO budget in the frame of joint projects, not mentioning the many guests visiting their colleagues at NII and giving seminars,
- Welcomed colleagues from Canada and USA for part of their sabbatical year and launching new joint research projects,
- Welcomed 8 German Post-docs and 11 German Master`s and PhD students directly supported by DAAD in the frame of the special MoU NII-DAAD,
- Co-organized various bi-lateral workshops with embassies in Tokyo or foreign partners (Czech Republic, France, Germany, etc.)
- Organized 50 Shonan seminars plus 1 School, 19 will be held in 2017 plus 1 School.

■ NII の国際交流の目的

グローバリゼーションは、今日における社会のキーワードです。私たちの生活は、社会とより密接になり、ソーシャルメディアやソーシャルネットワークの発展を支援する情報通信技術 (ICT) は、大変重要になっています。バーチャルネットワークの発展に伴い、ICTの急速な進歩は、新しい知識の普及のみならず、科学者間の協力のあり方にも変化が見られます。今日我々が直面している主要な課題の解決に科学の進歩は必要不可欠であり、特に研究上のネットワーク化は最も重要な課題です。そして、国際的な研究協力は、地球温暖化、環境、エネルギー、感染症のまん延等の問題の解決を見出す上で非常に重要であり、私たちが、次世代のためによりよい世界を創るためには、グローバルな相互提携・協力を構築することが必要となります。NII は、その創立以来、日本の情報科学分野において国際的な研究機関として活動するとともに、組織間の連携協定に基づき国際的な協力を推進する戦略を展開してきました。

NIIの国際協力の主な目的は、次のとおりです。

- 世界有数の研究機関との長期的なパートナーシップを通じて、研究の質を高めます。
- 幅広い国際的枠組みにおける科学技術の達成を支援します。
- 海外研究機関の様々なニーズや事情を考慮しつつ、また、知的財産の保護を尊重しながら、相互にバランスのとれた重要な利益を生み出します。
- NIIの研究成果を所外の研究者と共有し、それがNIIにとって、更に日本にとって有益なものになるようにします。
- 研究者のための共同研究・連携の機会を増やします。
- アジアにおける科学技術の発展を促進します。
- 優れた大学院生に博士課程の履修を促します。



これらの趣旨に基づいた国際交流を行なうことにより、新たな発想や文化に触れ、新しい視野を持つことは、NIIにとっても意義深いことです。それは、卓越したネットワークにおいてNIIのプレゼンスを高めると同時に、国際的な協力の価値及び必要性を再確認するものです。



■ International exchange activities

NII is engaged actively in initiatives including joint research and international exchange activities among researchers, to promote international exchange with universities and research institutes around the world. In connection with these, NII supports a wide range of research activities including the conclusion of international memorandum of understanding (MOUs), inviting researchers from MOU organizations (MOU Grant), and acceptance of interns from around the world (NII International Internship Program). In particular, NII has concluded MOUs with

104 institutions in 25 countries (as of July 31, 2017).

Other aspects of NII's international cooperation initiatives include organizing the NII Shonan Meetings and acceptance of international researchers under agreements with the German Academic Exchange Service (DAAD) and the Japanese-French Laboratory for Informatics (JFLI) as well as the acceptance of international students to the Department of Informatics of the Graduate University for Advanced Studies. We also organize events including lectures, seminars, and symposiums led by well known researchers.

The Global Liaison Office (GLO) was established at NII in January 2003 to serve as a foundation for these activities. The GLO is organized by NII faculty and staff. The Deputy Director General serves as its Director, assisted by an Acting Director.

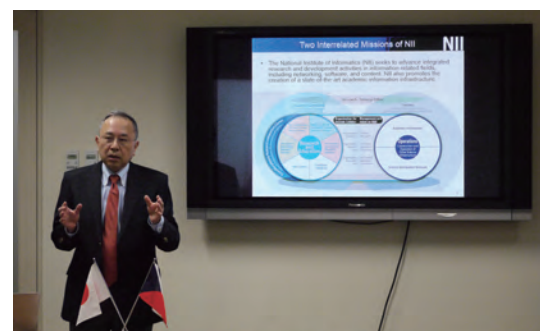
In addition to the activities noted above, the GLO also facilitates exchange with research institutions around the world through the study and implementation of various measures intended to promote international exchange, including the formulation of fundamental international-exchange policies. The NII's international exchange activities are being promoted further through evaluation and advice provided by the International Advisory Board.

■ 国際交流活動

NIIでは、海外の大学及び研究機関との国際交流を推進するため、共同研究の実施及び研究者の交流活動などを活発に行なっています。それに関連し、国際交流協定(MOU)の締結、MOU 機関からの招へい(MOU Grant)、インターンシップの受入れ(NII国際インターンシッププログラム)など、研究活動の支援を実施しています。特にMOUは、25か国・104機関(2017年7月末現在)と交流協定を締結しています。そのほか、国際連携の一環として、NII湘南会議の開催、ドイツ学術交流会(DAAD)及び日仏情報学連携研究拠点(JFLI)の協定により研究員の受入れ、また、総合研究大学院大学情報学専攻への留学生の受入れなど、更には著名研究者による講演の開催、セミナー・シンポジウムなど、様々な交流活動を行っています。

これらの活動の基盤として、所内に2003年1月、グローバル・リエゾンオフィス(GLO)を開設しました。GLOの組織は、NIIの教職員から構成されており、室長には副所長、室長を補佐するアクティングディレクターが就任しています。

GLOにおいては、上記以外に、国際交流に関する基本的な方針の策定など、国際交流を推進するための様々な施策を検討・実施し、海外の研究機関との交流を図っています。なお、NIIの国際交流活動は、国際アドバイザーボードによる評価、助言を受けることにより、一層の推進を図っています。



■ NII International Internship Program

NII International Internship Program is organized for Master's and PhD students from institutions with which NII has concluded MOUs. During the internship period, they work on each research topic under the supervision of NII supervisors. It has contributed significantly to NII's research activities by promoting exchange with our partners and by hosting and sponsoring interns since its inception in 2005.

■ NII 国際インターンシッププログラム

NII国際インターンシッププログラムは、NII がMOUを締結している協定機関の修士課程、博士課程の学生を対象としたプログラムです。インターンシップ期間中、彼らはNIIの指導教員の指導の下、各研究テーマに基づき研究に従事します。本プログラムは、2005年度に開始して以来、MOU締結機関との交流の促進や、国際会議での発表、国際論文の増加など、本研究所の研究活動に大きく貢献してきました。

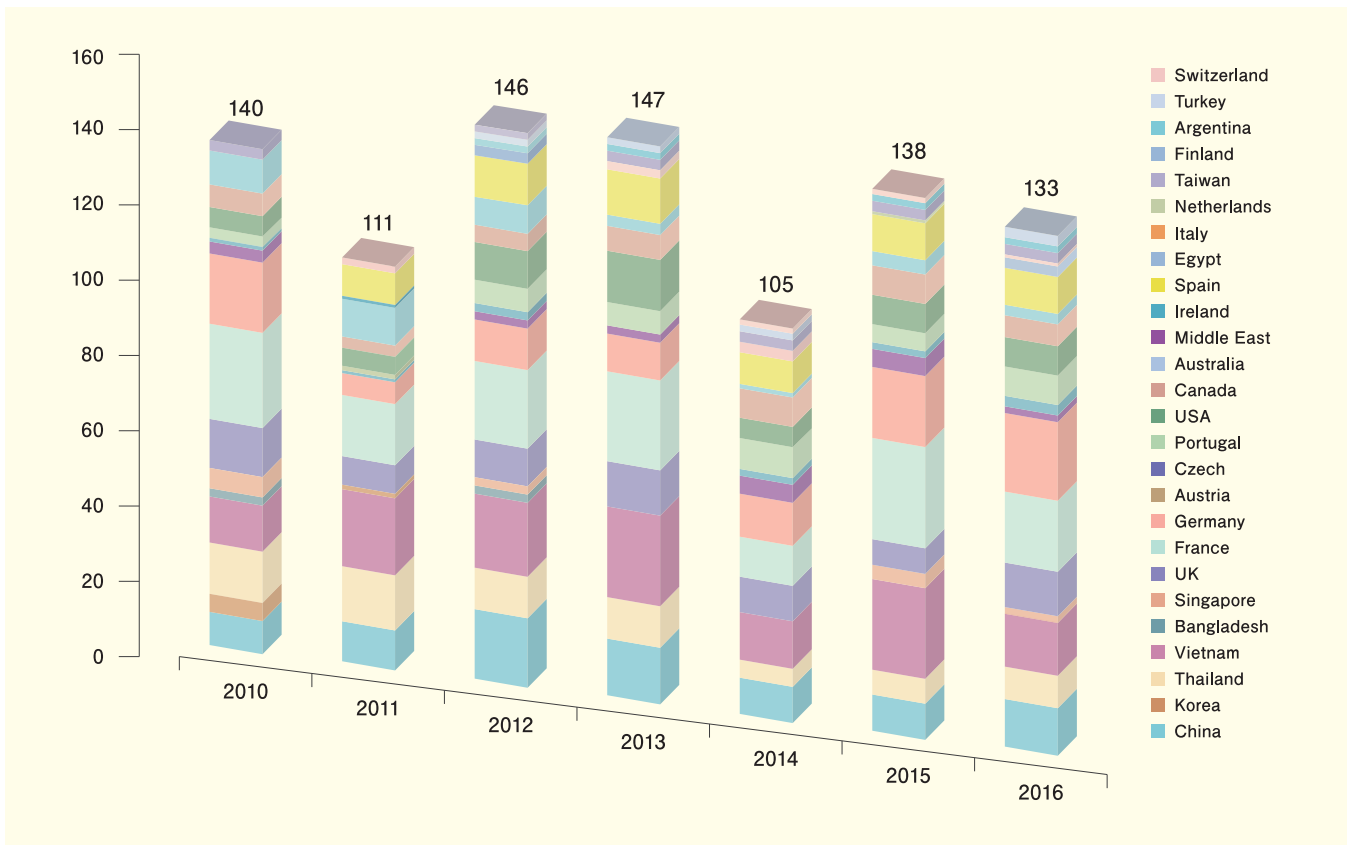


■ Outline of this program:

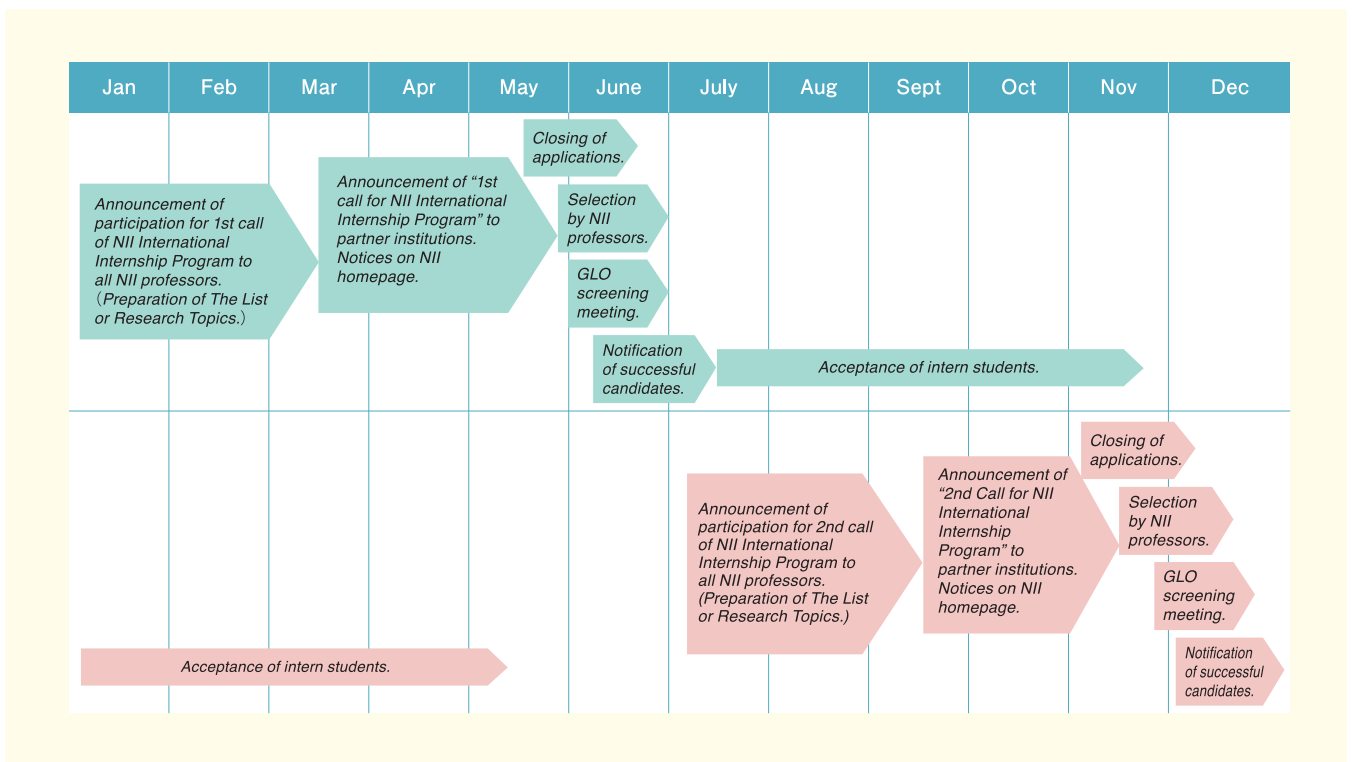
Eligible to apply	Graduate students from organizations with which NII has concluded MOUs (students enrolled in Master's and PhD programs)
Research period	2–6 months (180 days)
Expenses paid	<ul style="list-style-type: none"> • 171,000 yen/month in living expenses (5,700 yen/day) • Overseas traveller's accident insurance
Recruitment	We seek students to work on research topics proposed by NII faculty members. Applications are accepted twice annually, in September and March. Information on the program is made public by sending recruitment notices to our contact persons from our partner organizations and by posting information on the NII website.
Applications	The contact person proposes selected candidates from each organization.
Acceptance or rejection	The first screening is made by NII supervisors and then there is a final selection by Global Liaison Office committee members.

The certificate of completion is issued to the intern after he/she finishes the internship for the period of 2-6 months and submits a report to NII.

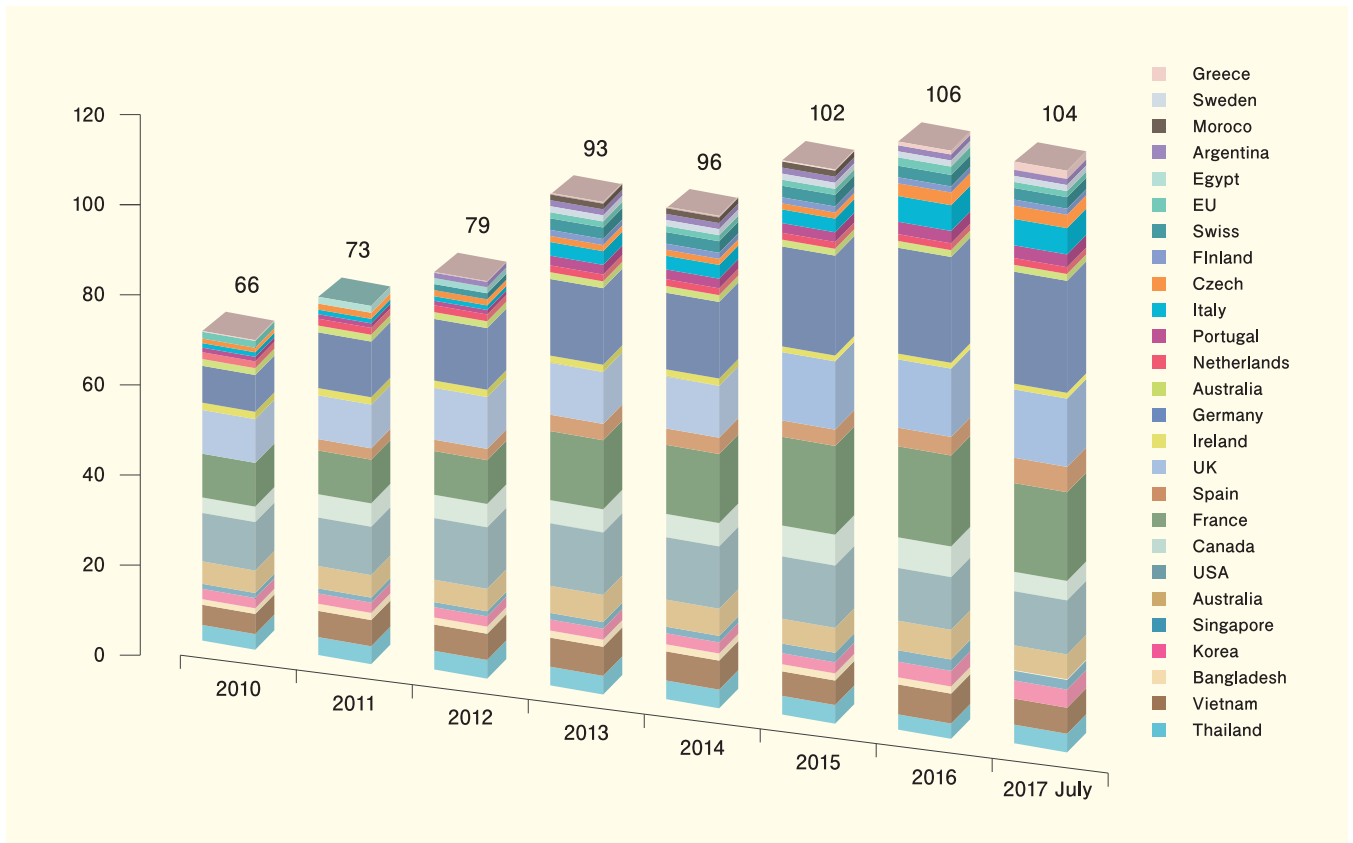
NII International Internship Program-Acceptance of students



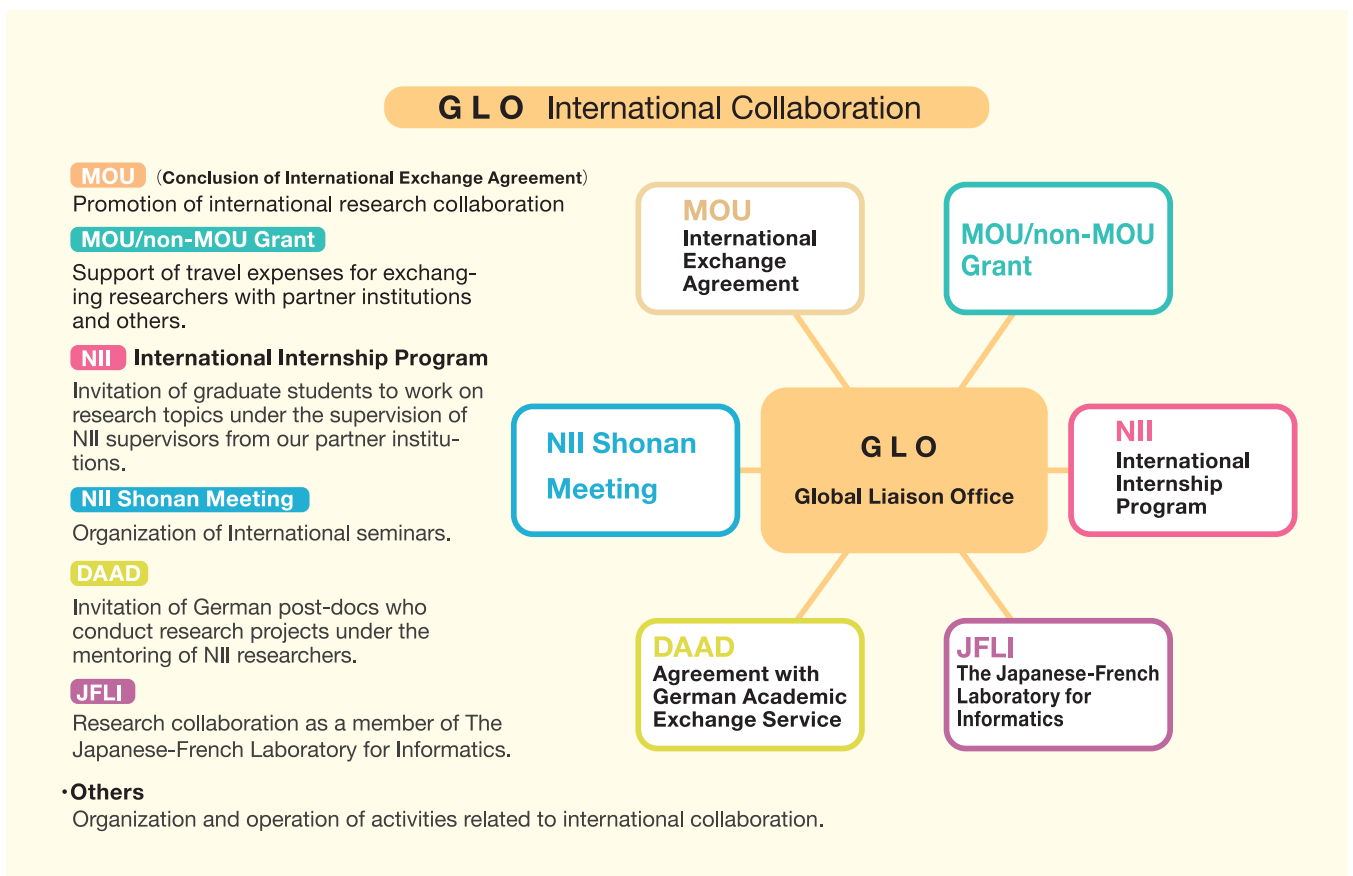
NII International Internship Program -Schedule



■ Number of MOU



■ International Exchange Activities Overview



International Exchange Agreements (MOUs) for Cooperation 104 institutions (as of July, 2017)



Ireland

- Lero - the Irish Software Research Centre (The University of Limerick)



Kingdom of the Netherlands

- Faculty of Civil Engineering and Geoscience, Delft University of Technology (TU Delft)



Federal Republic of Germany

- Faculty of Applied Informatics, University of Augsburg
- Institute of Information Systems, German Research Center for Artificial Intelligence (DFKI)
- The Faculty of Applied Science of the University of Freiburg
- RWTH Aachen University, (Faculty of Mathematics, Computer Science and Natural Sciences)
- The German Academic Exchange Service (DAAD)
- Saarland University
- Ludwig-Maximilians-Universität München
- Berlin Institute of Technology (TUB, TU Berlin)
- Technische Universität Braunschweig (TU Braunschweig)
- The Technische Universität München (TUM)
- Georg-August-Universität Göttingen
- The Information Science Group in the Dept. of Computer and Information Science, University of Konstanz (ISGUK)
- Department of Electrical Engineering and Computer Science, Bochum University of Applied Sciences
- The Faculty of Science, University of Potsdam
- Hochschulbibliothekszenrum des Landes Nordrhein-Westfalen
- German National Library of Science and Technology (TIB)
- German National Library of Medicine (ZB MED)



Swiss Confederation

- Institute of Electrical Engineering in École Polytechnique Federale de Lausanne



Italian Republic

- Dipartimento di Informatica, Università degli Studi di Torino
- Politecnico di Milano, Dipartimento di Elettronica, Informazione e Bioingegneria
- Università degli Studi di Ferrara (UNIFE)
- Dipartimento di Informatica - Scienza e Ingegneria (DISI), Università di Bologna



Spain

- Universitat Politècnica de València (UPV)
- Universidad Politécnica de Madrid (UPM)
- Facultat d'Informàtica de Barcelona, Universitat Politècnica de Catalunya (UPC)



Greece

- Athena Research & Innovation Center



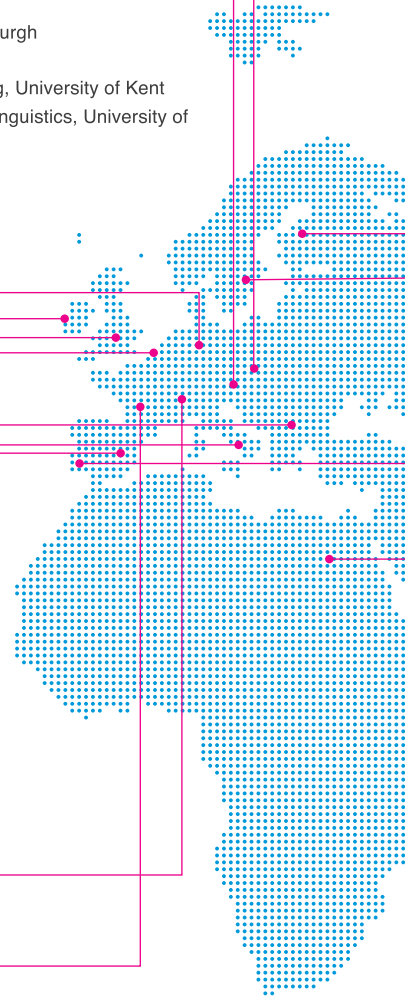
United Kingdom of Great Britain and Northern Ireland

- Department of Computer Science, Faculty of Engineering Science, University College London
- Faculty of Mathematics and Computing, The Open University
- Department of Computer Science, University of Bristol
- University of Bath
- Department of Computing at Imperial College London
- The Computing Laboratory, University of Oxford
- School of Computer Science & Electronic Engineering, University of Essex
- School of Informatics, University of Edinburgh
- Newcastle University
- Faculty of Sciences, School of Computing, University of Kent
- Department of Theoretical and Applied Linguistics, University of Cambridge
- UCL Big Data Institute (BDI)



French Republic

- University of Nantes (Atlantic 2020)
- Institut National de Recherche en Informatique et en Automatique (INRIA)
- Institut National Polytechnique de Grenoble
- Université Joseph Fourier-Grenoble 1
- Pierre and Marie Curie University (UPMC) Computer Science Laboratory of Paris 6 (LIP6)
- Institut National Polytechnique de Toulouse (INP-ENSEEIH)
- National Center for Scientific Research (CNRS)
- Université Toulouse III - Paul Sabatier
- The Electronics and Information Technology Laboratory (LETI)
- University of Nice Sophia Antipolis
- Centre de Recherche en Informatique de Lens (CRIL)
- The Blaise Pascal University of Clermont-Ferrand, (School of Engineering ISIMA, Faculty of Sciences, LIMOS Laboratory)
- The French National Audiovisual Institute (INA)
- Claude Bernard University Lyon 1
- Université Paris-Sud





 **Czech Republic**

- Faculty of Electrical Engineering, Czech Technical University in Prague
- The Institute of Physiology, Czech Academy of Sciences

 **Republic of Austria**

- Vienna University of Technology

 **Finland**

- Aalto University, School of Electrical Engineering

 **The Kingdom of Sweden**

- School of Computer Science and Communications (CSC), KTH Royal Institute of Technology

 **Portuguese Republic**

- Instituto de Engenharia de Sistemas e Computadores, Investigação e Desenvolvimento em Lisboa (INESC-ID)
- INESC Technology and Science (INESC TEC)

 **Arab Republic of Egypt**

- Egypt-Japan University of Science and Technology (E-JUST)

 **EU**

- GÉANT

 **Commonwealth of Australia**

- Data61
- The University of Queensland (UQ)
- The Faculty of Engineering and Information Technologies, The University of Sydney
- Department of Computing & Information Systems, Melbourne School of Engineering, The University of Melbourne

 **Kingdom of Thailand**

- Department of Computer Engineering, Chulalongkorn University
- School of Engineering and Technology, Asian Institute of Technology
- Faculty of Science, Kasetsart University

 **Republic of Singapore**

- School of Computing, National University of Singapore (NUS)
- Institute for Infocomm Research (I2R)

 **Socialist Republic of Viet Nam**

- International Research Center Multimedia Information, Communication, and Applications (MICA)
- Hanoi University of Science and Technology (HUST)
- Vietnam National University of Ho Chi Minh City (VNU-HCM)
- University of Science (Vietnam National University - Ho Chi Minh City)
- VNU University of Engineering and Technology



Canada

- Faculty of Mathematics, University of Waterloo
- Faculty of Science, Department of Computing Science, the Alberta Machine Intelligence Institute (AMII), University of Alberta
- School of Computer Science, McGill University
- Simon Fraser University
- Polytechnique Montréal



United States of America

- University of Michigan-Dearborn, College of Engineering and Computer Science
- College of Engineering, University of Washington, Seattle
- New Jersey Institute of Technology
- International Computer Science Institute
- University of Southern California
- North American Coordinating Council on Japanese Library Resources (NCC)
- The New Venture Fund (NVF) on behalf of the Scholarly Publishing & Academic Resources Coalition (SPARC)



People's Republic of China

- School of Information Science and Technology, Department of Automation, Tsinghua University
- Institute of Computational Mathematics and Scientific/Engineering Computing, Academy of Mathematics and System Sciences, Chinese Academy of Sciences
- Tongji University
- School of Electronics Engineering and Computer Science, Peking University
- The Hong Kong University of Science and Technology (HKUST)
- The School of Electronic Information and Electrical Engineering of Shanghai Jiao Tong University
- University of Science and Technology of China (USTC)
- Institute of Computing Technology, Chinese Academy of Sciences (ICT-CAS)



The Republic of Korea

- Department of Computer Science and Engineering, Seoul National University
- Korea Institute of Science and Technology Information (KISTI)
- Korea Education & Research Information Service (KERIS)



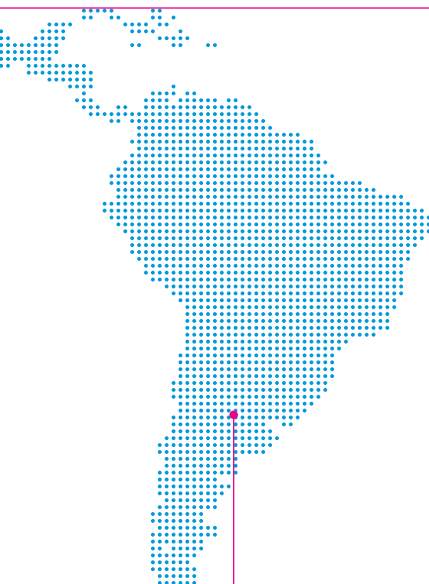
Taiwan

- College of Electrical Engineering and Computer Science, National Taiwan University
- National Tsing Hua University College of Electrical Engineering and Computer Science (NTHU EECS)



Republic of Argentina

- The Faculty of Exact and Natural Sciences of Buenos Aires University



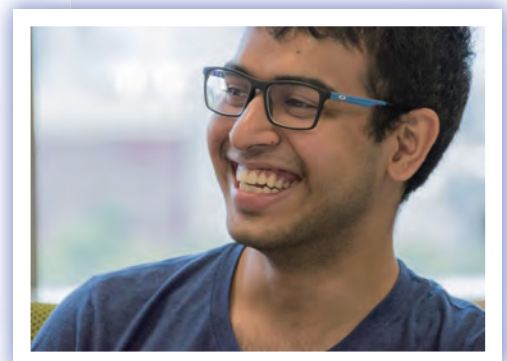


■ Acceptance of Students from Abroad

The NII has participated in The Graduate University for Advanced Studies (SOKENDAI) and established Department of Informatics to train IT researchers and engineers at the international level. The program of study encompasses six fields: Foundations of Informatics, Information Infrastructure Science, Software Science, Multimedia Information Science, Intelligent Systems Science, and Information Environment Science. It accepts students from abroad and provides an educational environment well-suited to international students, who account for approximately 60% of its student body. Based on a culture that emphasizes lively intercultural exchange among students, the program prepares its graduates to thrive in various fields.

■ 外国人留学生の受け入れ

NIIは総合研究大学院大学に参画、情報学専攻を開設し、国際レベルのIT研究者・技術者の養成を目指しています。本専攻の教育分野は、情報基礎科学・情報基盤科学・ソフトウェア科学・情報メディア科学・知能システム科学・情報環境科学の6分野です。海外からの留学生を積極的に受け入れており、全体の約6割に当たる留学生に対するきめ細やかな教育環境が整っています。学生間の異文化交流も活発に行われ、様々な分野で活躍する人材を送り出しています。



■ MOU Grant & Non-MOU Grant

MOU Grant was established in 2005 and Non-MOU Grant was established in 2006 as a system of financial support for the research exchange with our partner institutions and non-partner institutions. The Grants are provided when accepting researchers from abroad for the purpose of research exchange with NII researchers or when NII faculty members visit our partner institutions abroad for a research exchange as a financial support of travel expenses.

There are two calls per year for MOU Grant and Non-MOU Grant. Aiming at further research collaboration with foreign research institutes applications are reviewed by GLO and final selection is made by GLO.

■ MOU Grant & Non-MOU Grantの実施

MOU締結機関又はそれ以外の機関との研究交流助成制度として、2005年度に「MOU Grant」、その翌年に「Non-MOU Grant」を創設しました。

MOU Grant は、NIIとMOUを締結あるいは締結予定である海外の大学・研究機関等との研究交流を目的とした派遣及び招へいを行う場合、Non-MOU Grant はMOU締結機関以外の機関との共同研究の遂行を目的とした招へいを行う場合に、NIIの教職員及び海外の研究者等に必要な旅費(渡航費・滞在費)の助成を行い、より一層の研究交流の促進を図ることを目的としています。MOU Grant又はNon-MOU Grantの実施にあたっては、年2回の募集を行い、GLOにおいて審議の上決定します。





■ Agreement with German Academic Exchange Service (DAAD)

NII has a special agreement with the German Academic Exchange Service (DAAD) that allows German post-docs to stay at NII to conduct their research project under the mentoring of NII researchers.

In the frame of that agreement German post-doc can stay at NII for minimum 3 months (6 months is recommendable) up to 2 years supported by DAAD. During that period, they implement their own project in connection with NII mentors. The post-docs have the possibility to recruit Masters'/PhD students or engineers to help their research during their stay. Since NII is an interuniversity organization they can also visit NII's partner universities and research organizations in Japan to strengthen their Japanese network.

■ ドイツ学術交流会(DAAD)との協定

NII は、ドイツ学術交流会(DAAD)と、ドイツ人ポストドクがNII教員の指導の下研究プロジェクトを実施できる特別協定を締結しています。本協定では、ポストドクは、DAADの支援を受けて、最低3か月(6か月を奨励)から最長2年間NIIに滞在することができます。その期間中、NIIの指導者と関連がある独自のプログラムを遂行します。ポストドクは、プロジェクト遂行のため、修士課程及び博士課程の学生や技術者を受け入れることもできます。NIIは大学共同利用機関であることから、ポストドクは日本でのネットワークを強化するために、NIIのパートナーである日本の大学や研究機関を訪問することもできます。



The Japanese-French Laboratory for Informatics (JFLI)



Kae Nemoto
Professor
Japanese co-director of JFLI

教授 根本 香絵

The Japanese-French Laboratory for Informatics (JFLI-<http://jfli.cnrs.fr>) was established in 2008 to conduct collaborative research in the field of informatics with five universities and research institutions, the National Center for Scientific Research (CNRS) and the University Pierre & Marie Curie (UPMC, Paris 6) from France and the University of Tokyo, Keio University, and NII from Japan. The JFLI served as a hub for the research collaborations between France and Japan for five years, and in 2012 the JFLI was reformed as an International Joint Unit (UMI) and extended cooperation among the partners.

The research at the JFLI has an emphasis on important and challenging fields which particularly benefit collaborative research efforts. Five research topics have been identified as the core research fields at the JFLI, which are (1) Next Generation Networks, (2) High Performance Computing, (3) Software, Programming Models and Formal Methods, (4) Virtual Reality and Multimedia and (5) Quantum Computation.

Since the beginning of the JFLI, it has engaged with the collaboration among the partners and the support for graduate students and young researchers. Through the JFLI activities, we have now established a network of collaborating researchers. We believe that collaborative efforts within this network will further strengthen research at JFLI. The JFLI workshop in March 2016 and the joint workshop with Kyushu University in 2017 were welcome examples, and in future we expect further opportunities to arise. Next the other new direction we undertook at JFLI was to extend our activities to include collaborations with other UMI units in Asia. JFLI is engaged to support collaborative research activities and pursues excellence in research.

■ 日仏情報学連携研究拠点 (JFLI)

日仏情報学連携研究拠点(JFLI-<http://jfli.cnrs.fr>)は、情報学研究における日仏間の交流拠点として、フランス国立科学研究センター(CNRS)を中心に、ピエール&マリー・キュリー大学(UPMC,パリ第6大学)、東京大学(大学院情報理工学系研究科)、慶応義塾大学とNIIの5機関により2008年に設立されました。2012年よりCNRSの国際研究組織UMIに昇格したことに伴い、より活発な研究交流を担っています。日仏情報学連携研究拠点では、情報学における重要かつ挑戦的な分野を中心に、主要な研究テーマとして(1)次世代ネットワーク(2)ハイパフォーマンスコンピューティング(3)ソフトウェア、プログラミングモデル、形式手法(4)バーチャルリアリティ、マルチメディア(5)量子コンピューティングを挙げ、共同研究を推進しています。これまでに、フランスの研究機関からの研究者や大学院生の受け入れをはじめ、各機関で共同研究を推進してきました。また、共同研究強化のためのワークショップや、大学院インターン生の研究発表の場としての研究発表会も定期的に開催しています。JFLIセミナーも定期的な活動の一つです。最近では、これまでの活動によりJFLIを中心とした研究者のネットワークが形成されつつあります。2016年3月には、JFLIに関わりのあった外部研究者も招聘し、NIIで全体ワークショップを開催しました。また、大学等の外部機関との共同ワークショップの企画も行っています。これからはアジア諸国に広がるCNRS国際研究組織UMIのなかでも、研究テーマの近いUMIとの連携を予定しています。

今後も、2カ国間の研究連携により力を入れつつ、また国内の各大学とも協力し、情報学の研究を推進していきます。



NII Shonan Meeting

■ Outline

In February 2011, the NII launched the NII Shonan Meeting, the first Dagstuhl*-style Seminar held in Asia. The purpose of the NII Shonan Meeting is to resolve various challenges in the field of informatics by assembling the very best researchers from around the world to engage in intensive discussions on issues in the field of informatics in an atmosphere that promotes close interaction. This meeting is based on a partnership agreement concluded with Kanagawa Prefecture.

The meeting's venue, the Shonan Village Center, provides an environment in which participants can focus on research activities in a setting that provides both spectacular natural beauty and easy access from Narita Airport. This meeting ran for 87 times as of the end of March, 2017, and "NII Shonan School" that is with top-class students and young researchers in the field of informatics as the main targets was held in August, 2014. The program also includes various activities intended to deepen interaction between participants, including hikes in nearby natural areas and historical walking tours of Kamakura.

*Dagstuhl Seminar: A key seminar series in the field of informatics, held roughly every week, in Dagstuhl, Germany. The series is based on a structure whereby participants live in close quarters for one week for intensive discussions on various topics.

■ 概要

NIIは、アジアにおける最初のダグストゥール形式*のセミナーとなる「NII湘南会議」を2011年2月からスタートしました。NII湘南会議は、世界トップクラスの研究者が集まり、情報学分野における課題を合宿形式により集中的に議論することによって、情報学の難問を解決することを目指しています。本会議開催にあたっては、神奈川県と協定を結び、連携・協力して実施しています。開催場所である「湘南国際村センター」は、成田空港からのアクセスも良く、また自然豊かな場所に立地し、研究活動に専念するのに最適な環境です。2017年3月末現在、開催されたセミナーは87回に上り、2014年8月には情報学分野のトップレベルの学生と若手研究者を主対象とした「NII Shonan School」を実施しました。

*ダグストゥール(Dagstuhl)セミナー:情報学における世界でトップレベルのセミナー。ドイツのダグストゥールで毎週のように開催されている。約1週間、合宿形式でトピックに基づいた議論を集中的に行うことで有名。

■ Call for Proposal

The NII offers a continuous open call for seminar proposals. Please note three yearly deadlines (June 15, September 15, and December 15) for submitting the proposals. Individuals submitting plans will be notified whether their plans have been adopted following a review by the Academic Committee.

Address any inquiries to: The Office of The NII Shonan Meeting : shonan@nii.ac.jp

■ セミナー企画募集

NIIでは、NII湘南会議の企画を募集しています。企画は、年3回(6月15日、9月15日、12月15日)の公募を行い、学術審査委員会での審査を経た後、採否結果を通知します。

Reflections on the Occasion of the 100th Shonan Meeting

Zhenjiang Hu

Professor
NII Shonan Meeting Academic Chair

教授 胡 振江



October 30th 2017 will mark the 100th event of the Shonan Meetings, the first international Dagstuhl-style meetings in Asia for top-class academics and engineers to discuss openly problems and research visions in informatics. By August 21st 2017, 95 meetings had been successfully held with 2133 participants from 55 countries. This success would not be possible without the considerable effort of the meeting organizers, who have carefully designed the program, and of the participants, who have actively contributed to intensive discussion and research communication. In particular, it owes much to the Shonan Village Center for taking care of all on-site local arrangements and to the local government of Kanagawa Prefecture for generously providing space in the annex for holding the Shonan Meetings. We, the members of the organizing committee, are proud of the Shonan Meetings, and we would like to take this opportunity to express our deepest gratitude.

While the first Shonan Meeting was held in February 2011, the feasibility study at NII started as early as 2008. Following the idea of the Dagstuhl Seminars, we planned our Shonan Meetings to have four features: each meeting is small with about 25-35 participants, all participants are invitation-based, it is Asia-based where at least one of the meeting organizers is from Asia, and it provides the best meeting environment with Japanese hospitality. We had a dream of making the Shonan Meetings the "Mount Liang (梁山泊) in Informatics," an academic hub where heroes in informatics gather and take on the important challenges. One big concern at the time was whether researchers from America or Europe would be willing to take such a long trip to Japan to attend the meetings. This concern quickly disappeared after a successful trial, the GRACE Meeting on Bidirectional Transformations held in Shonan Village Center in December 2008. The GRACE Meeting attracted about 30 internationally active researchers; 95% of them were very satisfied with the meeting and wished to have such a style of meetings in Japan in the future.

This was indeed very encouraging!

The Shonan Meetings did not start as smoothly as we hoped. Just after the first, successful Shonan Meeting in February 2011, we had a big earthquake and tsunami in Japan, which forced us to stop several Shonan Meetings that were supposed to follow the first one. It was difficult to decide when these meetings would be resumed. With the great effort of the organizers and the participants, the Shonan Meetings resumed in just half a year, which was a miracle. Since then, the Shonan Meetings have gained a reputation as a premier venue for intensive research collaboration, and they have attracted more and more proposal submissions. Last year, we accepted about 30 excellent meeting proposals.

While the NII Shonan Meetings are invitation-based, the results from the meetings are published widely in a timely manner as technical reports. Some of them are even published as books in Springer's NII Communication Series. The books in the series aim to provide a vision of future trends inspired by discussions at the meetings and the latest research directions based on surveys and discussions. In addition, we invite internationally outstanding scientists to organize the NII Shonan Schools (NSS), which aim to provide a series of advanced lectures for about 30 participants who are mainly PhD students and young researchers and provide an opportunity for the

participants to build up, enhance and widen their international collaboration network.

Moshe Vardi, former Editor-in-Chief of CACM, raised the question of "Where have all the workshops gone?" in an editor's letter in 2011, calling for a revival of the "old-style" workshops where researchers could informally share their latest work in progress and freely interact with each other. The Shonan Meetings have witnessed the importance of such workshops, and it is no wonder that some other countries such as Korea are now planning similar workshop centers. We are glad that the Shonan Meetings can provide a top-notch international collaboration environment to researchers in informatics, and we believe that the Shonan Meetings will continue to make a big impact on the world.





SHONAN MEETING

<http://www.nii.ac.jp/shonan>



Shonan Village Center 湘南国際村センター

Recent Topics of NII Shonan Meeting

- Current Trends in Combinatorial Optimization, April 11 - 14, 2016, 35 participants
- Controlled Adaptation of Self-adaptive Systems (CASA_S), April 25 - 28, 2016, 31 participants
- Theory and Applications of Geometric Optimization, May 30 - June 2, 2016, 32 participants
- Recent Advances in Randomized Numerical Linear Algebra, July 25 - 28, 2016, 23 participants
- Dynamic Networks Visual Analytics: Approaches to facilitate visual analysis of complex and dynamic network data., August 1 - 4, 2016, 28 participants
- Web-based Molecular Graphics, September 5 - 8, 2016, 28 participants
- Bidirectional Transformations, September 26 - 29, 2016, 26 participants
- Cognitive Development and Symbol Emergence in Humans and Robots, October 3 - 7, 2016, 20 participants
- Perception in Augmented Reality, November 14 - 18, 2016, 31 participants
- Implicit and Explicit Semantics Integration in Proof Based Developments of Discrete Systems, November 22 - 25, 2016, 30 participants
- Algorithmics for Beyond Planar Graphs, November 28 - December 1, 2016, 26 participants
- Microfluidic Biochips: Bridging Biochemistry with Computer Science and Engineering, February 27 - March 2, 2017, 19 participants
- Mining Software Repositories: Accomplishments, Challenges and Future Trends, March 6 - 10, 2017, 29 participants
- Computational Metabolomics, March 20 - 23, 2017, 27 participant





NII Inter-University Research Institute Corporation /
Research Organization of Information and Systems
National Institute of Informatics

2-1-2 Hitotsubashi, Chiyoda-ku, Tokyo 101-8430

Tel: + (81) -3-4212-2000

- About International Exchange
Planning Division, International Affairs and Education
Support Team
international@nii.ac.jp
- SOKENDAI (About Graduate University for Advanced Studies),
Department of Informatics Course
Planning Division, International Affairs and Education
Support Team
daigakuin@nii.ac.jp