北京大学
PEKING UNIVERSITY

INTERNATIONAL ELITE PH.D. PROGRAM IN COMPUTER SCIENCE

Admissions Guide 2021

北京大学 计算机科学技术系
Department of Computer Science and Technology, Peking University

PEKING UNIVERSITY

INTERNATIONAL ELITE PH.D. PROGRAM IN COMPUTER SCIENCE

Admission Requirements:
Non-Chinese citizens with a valid passport
Bachelor or Master Degree
Proof of English Proficiency for non-English native speakers:
TOEFL iBT>100 or IELTS>6.5 or GRE>320

Contact Information

International Students Division,
Office of International Relations (For application)
TEL: (86-10)-4275 1230
E-mail: study@pku.edu.cn
www.isd.pku.edu.cn

International Ph.D. Program Admission,
School of EECS (For program enquiry)
Tel: (86-10)-4275 0270
E-mail: gradadmissions.cs@pku.edu.cn
www.eecs.pku.edu.cn

*Students will study and live in either Changping New Campus or the Yanyuan Campus
(It will be specified in the Letter of Admission)*

Application Deadline	12\20 02\28 2020 2021
Application Link	http://www.studyatpku.com/lxsgl/

CONTENTS

Our Program

- The International Elite Ph.D. Program in the Department of Computer Science & Technology at Peking University is an English-based program oriented to international (non-Chinese) students. It aims at educating and advancing talented young scholars for high-quality research in the field of computer science.

- This program lasts 5 years for applicants with Bachelor's Degree and 4 years with Master's Degree. It involves coursework, independent research, and dissertation.

- This program enrolls approximately 10-20 overseas students annually.

- ## *Majors and Research Areas*

Algorithmic game theory & computational economics

Natural language understanding

Intelligent software & requirement engineering

Software engineering & system software

Cloud computing & pervasive computing

Algorithmic game theory & computational economics

Programming language & program analysis

Databases & data mining

Network information processing & information security

Edge intelligent computing system

Hardware-software co-design

Computer graphics & data visualization

Visual big data & brain-like computing

Artificial intelligence & media computing

- *Compulsory Courses for Applicants with a Bachelor Degree*

Lecture Series on Contemporary China (2 credits)
Chinese Language (2 credits)
from Peking University

Scientific Writing (2 credits), Study of Domain Frontier (3 credits)
Methodology and Practice for Scientific Research (3 credits)
Reading of Domain Publication (3 credits), Teaching Practice (2 credits)
from School of EECS

Advanced Compiler Techniques (3 credits)
Mathematical Structures in Programming (3 credits)
Parallel and Distributed Computing (3 credits)
Introduction to Cyber Security(3 credits), Randomized Algorithm (3 credits)
Design Principle of Programming Languages and Probabilistic Programming (3 credits)
Computer Graphics and 3D Vision (3 credits)
Advanced Computer Networks (3 credits), Natural Language Processing (3 credits)
Formal Semantics of Programming Languages (3 credits)
Advanced Computer Architecture (3 credits)
Quantitative Analysis on Open Source Software (3 credits)
from the Department of Computer Science & Technology

**Subject to change

Selective Courses for Applicants with a Bachelor Degree

Computational Photography(3 credits)
Game Theory(3 credits)
Software Digital Sociology(3 credits)
Virtual Reality(3 credits)
Software Hardware Co-design(3 credits)
The Theories and Algorithms of Multimedia Information Retrieval (3 credits)
Ubiquitous Computing and Big Data(3 credits)
Technique and Application of Deep Learning(3 credits)
Emerging Technologies in Wireless Networking(3 credits)
Cloud Computing and Big Data (3 credits)
Software Metrics (3 credits)
Blockchain Technology and Applications (3 credits)
Software Analysis (3 credits)
Theoretical Foundations in Blockchain Technology (3 credits)
Computer Generated Imagery and Visual Effects(3 credits)

from the Department of Computer Science & Technology

**Subject to change

- *Compulsory & Selective Courses for Applicants with a Master Degree*

Lecture Series on Contemporary China (2 credits)
Chinese Language (2 credits)

from Peking University

Scientific Writing (2 credits), Study of Domain Frontier (3 credits)
Methodology and Practice for Scientific Research (3 credits)
Reading of Domain Publication (3 credits)

from School of EECS

Computational Photography(3 credits)
Ubiquitous Computing and Big Data(3 credits)
Game Theory(3 credits), Software Digital Sociology(3 credits)
Virtual Reality(3 credits), Software Hardware Co-design(3 credits)
The Theories and Algorithms of Multimedia Information Retrieval (3 credits)
Technique and Application of Deep Learning(3 credits)
Emerging Technologies in Wireless Networking(3 credits)
Cloud Computing and Big Data (3 credits), Software Metrics (3 credits)
Blockchain Technology and Applications (3 credits) , Software Analysis (3 credits)
Theoretical Foundations in Blockchain Technology (3 credits)
Computer Generated Imagery and Visual Effects(3 credits)

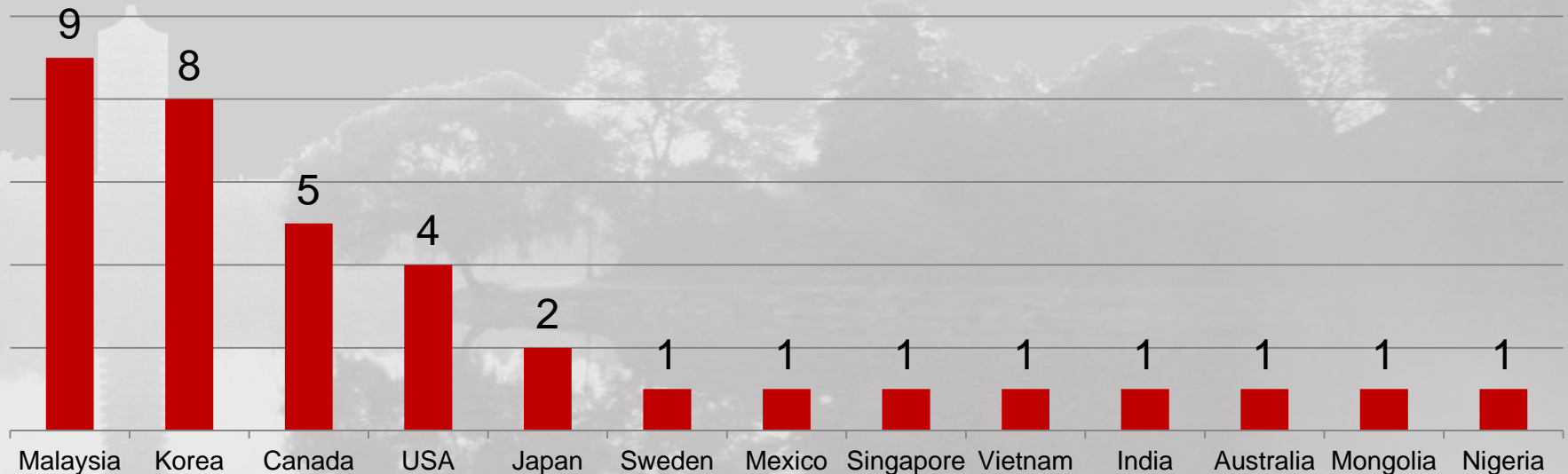**from the Department of Computer Science & Technology**

**Subject to change

Department of Computer Science & Technology

- The Department of Computer Science & Technology was established in 1978. Its origin can be traced back to Programming Specialty affiliated to the Department of Mathematics and Mechanics since 1957.

- It contains five institutes and two centers. The institutes are Institute of Computer Architecture, Institute of Network Computing & Information Systems, Institute of Software, Institute of Computational Linguistics and Institute of Digital Media. The two centers include Center for Energy-efficient Computing & Applications and Center on Frontiers of Computing Studies.

- **Starting Fall 2021, graduate students of the Department of Computer Science & Technology will be studying and living in either Changping New Campus or the Yanyuan Campus (It will be specified in the Letter of Admission).**

At present, the Department of Computer Science and Technology has 105 faculty members and covers the most comprehensive research fields in Computer Science. We conduct a wide range of researches in various areas, keep a close academic relationship with many international universities and research institutes and also cooperate with many well-known companies in the industry closely.

It has 1561 full-time student enrolled, including 972 undergraduate students, 284 master students and 305 doctoral students.

Malaysia	Korea	Canada	USA	Japan	Sweden	Mexico	Singapore	Vietnam	India	Australia	Mongolia	Nigeria
9	8	5	4	2	1	1	1	1	1	1	1	1

International students enrolled in C.S. in recent years(from 2015)
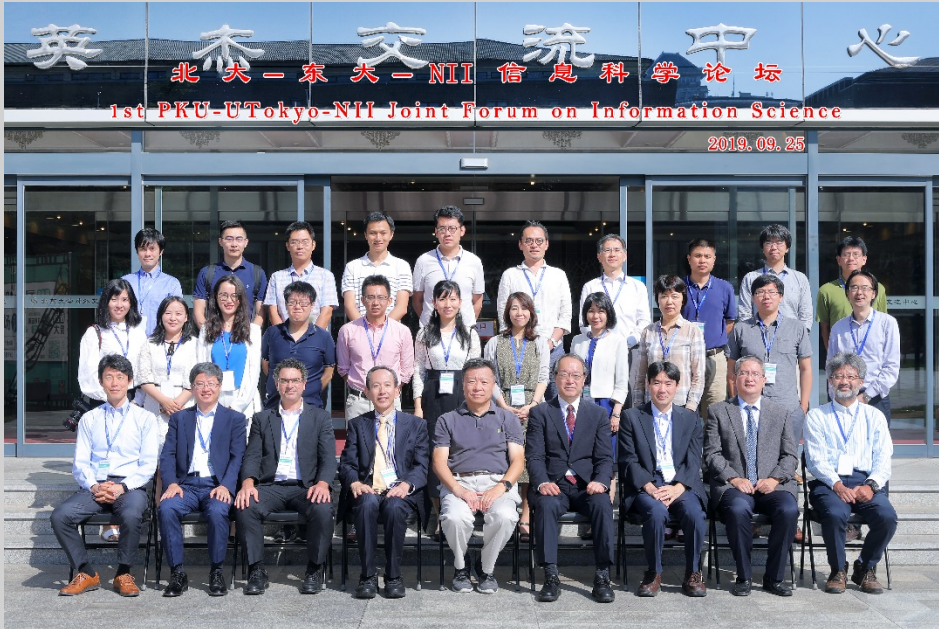
2019.9.25: 1st PKU-UTokyo-NII Forum on Informatics Sciences

2019.11.15: Huawei-Peking University Computer Science Seminar

2019.12/14-15:
The 9th International Symposium
on High Confidence Software &
111 Project Annual Meeting &
Annual Meeting of Key Lab.
of Confidence Software Technologies

2019.7:
Prof. John Hopcroft's course
Mathematics in Information Science

2018.4.19: ICPC 2018 World Finals

Sports Team

Program Requirement

- Students are required to successfully complete all course work, a Ph.D. dissertation and the defense of the dissertation within the required time period. Students also need to publish their research work, including but not limited to research papers, patents, software copyright, book, etc. After meeting all above requirements and with the approval of University Degree Committee, the Ph.D. Degree in Computer Science at Peking University will be awarded.

- Applicants must be non-Chinese citizens.

- Applicants must complete all academic requirements and obtain a Bachelor or Master's degree before enrollment (August 31, 2021).

- Applicants should meet the health requirements, compliance with Chinese government laws, regulations and school rules and regulations.

Application Deadline!

- The first round is December 20, 2020, please make sure to mail out your application materials on or before December 20, 2020.

- The second (and final) deadline is February 28, 2021. Please make sure to mail out your application materials on or before February 28, 2021.

- **Mailing address:**

Room 1122, Science Building No.1,

Department of Computer Science & Technology,

School of EECS, Peking University, Beijing, China, 100871

Tel: +86-10-62750278

Application Instructions

- [PKU Application Form for International Students (Master and Ph.D. Programs)](#) with an ID photo + non-refundable application fee of 800RMB. Fill in the application form and submit, then print the auto-generated hardcopy. **Please select a supervisor that you are interested in working with.

- Graduation certificate and degree diploma (applicants expecting to graduate should provide an official letter stating the expected graduation date). Must be original documents or certified copies in either Chinese or English.

- Official transcripts must be up to the present, including dates of attendance, all subjects studied, grades earned and marks achieved on examinations. Must be original documents or certified copies in either Chinese or English.

- A personal statement (3000 words, in English, including research proposal, a brief introduction of your current institution/alma mater, such as ranking within the country/state and how GPA is being calculated). ([template](#))

- 3 recommendation letters are required. The referees should be professors/associate professors or person with relevant academic/professional title. At least one of them should have knowledge of the applicant's recent academic or research work. The recommendation letters must be in either Chinese or English. (template)

- Official proof of English proficiency test scores if needed (TOEFL, IELTS or GRE) Students whose mother language is not English must have TOEFL iBT (100+) or IELTS (6.5+) or GRE (315+) scores to prove their English language proficiency.

- 1 copy of the applicant's valid passport (the passport type must be ordinary).

- Table of contents and abstracts of the applicant's research publications and any other original achievements in the applicant's study area.

- Curriculum vitae (CV) or resume.

Evaluation Process

- **<u>Initial Screening:</u>** The admission committee from the Department of Computer Science & Technology will evaluate the complete application materials. Applicants who passed the initial screening will receive an interview offer in either January or March 2021.

- **<u>Interview:</u>** Candidates will mainly talk about personal research experience, opinions on the research area of interest, and proposed study/research directions of interest.

- **<u>Admission:</u>** An "Admission Notice" will be sent to the admitted candidates by the end of June 2021.

Tuition & Financial Aid

- The annual tuition fee for this program is 50,000RMB

- There are different types of scholarship. For detailed information, please visit http://www.isd.pku.edu.cn/.

  **As an example, the Chinese Government Scholarship will provide registration and tuition fees, basic learning materials every semester, accommodation at Zhongguanyuan Global Village at Peking University, the fee for outpatient medical service, Comprehensive Medical Insurance and Protection Program, and generous living allowance.

- The Department of Computer Science & Technology at Peking University provides scholarships for each candidate per academic year.

Contact Information

For Application

- International Students Division, Office of International Relations, New New Sun Student Center, Peking University,
- TEL: (86-10)-6275 1230
- E-mail: study@pku.edu.cn
- www.isd.pku.edu.cn

For Program Enquiry

- International Ph.D. Program Admission, Department of Computer Science & Technology, Room 1122, 1st Science Building, Peking University
- TEL: (86-10)-6275 0278
- E-mail: gradadmissions.cs@pku.edu.cn
- https://cs.pku.edu.cn/info/1115/2783.htm